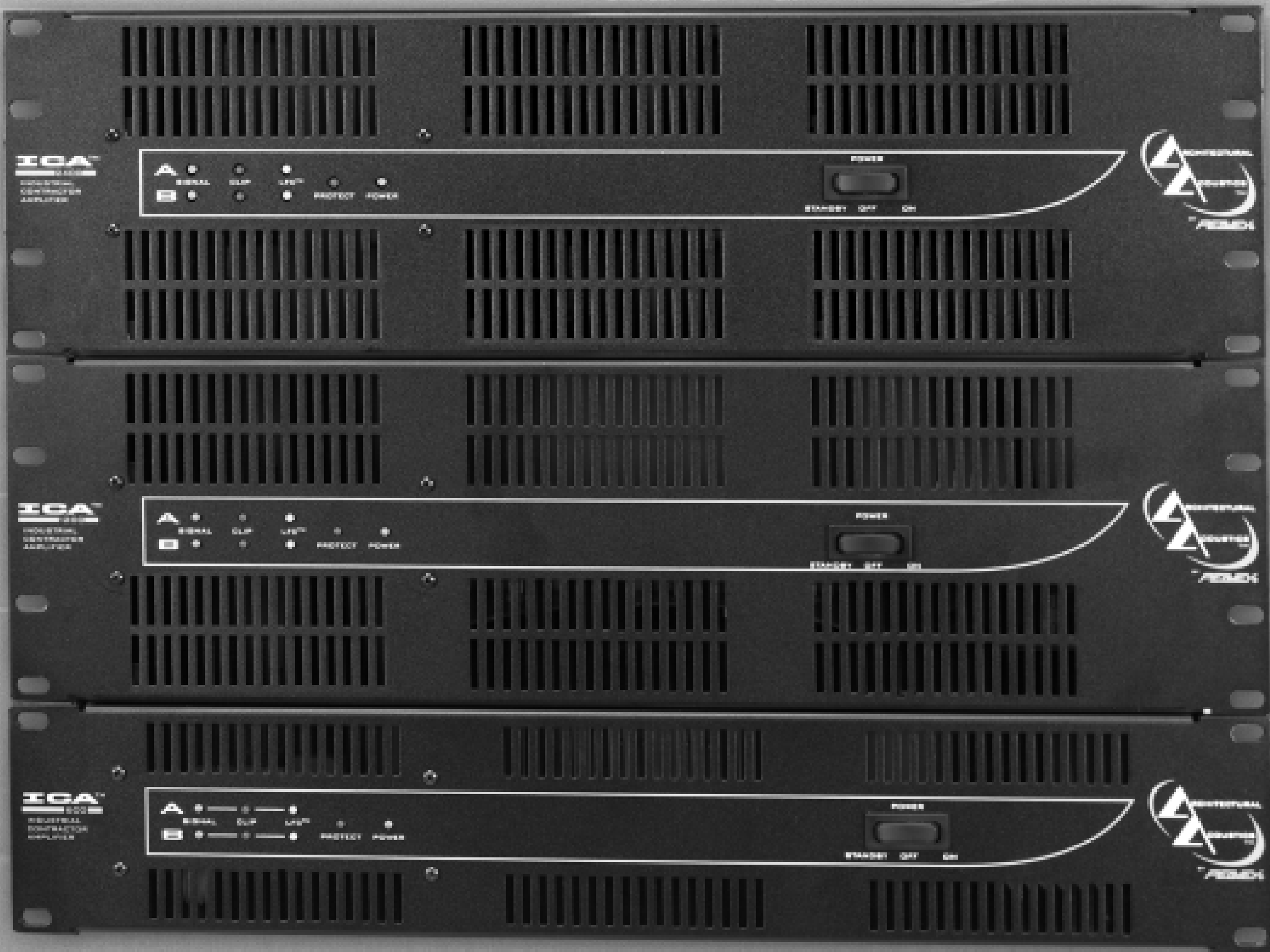
ICA™ SERIES

INDUSTRIAL CONTRACTOR AMPLIFIERS



OPERATING GUIDE

Intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

Intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

CAUTION: Risk of electrical shock — DO NOT OPEN!
CAUTION: To reduce the risk of electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

WARNING: To prevent electrical shock or fire hazard, do not expose this appliance to rain or moisture. Before using this appliance, read the operating guide for further warnings.

Este símbolo tiene el propósito, de alertar al usuario de la presencia de “(voltaje) peligroso” sin aislamiento dentro de la caja del producto y que puede tener una magnitud suficiente como para constituir riesgo de descarga eléctrica.

Este símbolo tiene el propósito de alertar al usario de la presencia de instruccones importantes sobre la operación y mantenimiento en la información que viene con el producto.

PRECAUCION: Riesgo de descarga eléctrica ¡NO ABRIR!
PRECAUCION: Para disminuír el riesgo de descarga eléctrica, no abra la cubierta. No hay piezas útiles dentro. Deje todo mantenimiento en manos del personal técnico cualificado.

ADVERTENCIA: Para evitar descargas eléctricas o peligro de incendio, no deje expuesto a la lluvia o humedad este aparato Antes de usar este aparato, Iea más advertencias en la guía de operación.

Ce symbole est utilisé dans ce manuel pour indiquer à l’utilisateur la présence d’une tension dangereuse pouvant être d’amplitude suffisante pour constituer un risque de choc électrique.

Ce symbole est utilisé dans ce manuel pour indiquer à l’utilisateur qu’il ou qu’elle trouvera d’importantes instructions concernant l’utilisation et l’entretien de l’appareil dans le paragraphe signalé.

ATTENTION: Risques de choc électrique — NE PAS OUVRIR!

ATTENTION: Afin de réduire le risque de choc électrique, ne pas enlever le couvercle. Il ne se trouve à l’intérieur aucune pièce pouvant être reparée par l’utilisateur. Confiez I’entretien et la réparation de l’appareil à un réparateur Peavey agréé.

AVERTISSEMENT: Afin de prévenir les risques de décharge électrique ou de feu, n’exposez pas cet appareil à la pluie ou à l’humidité. Avant d’utiliser cet appareil, lisez attentivement les avertissements supplémentaires de ce manuel.

Dieses Symbol soll den Anwender vor unisolierten gefährlichen Spannungen innerhalb des Gehäuses warnen, die von Ausreichender Stärke sind, um einen elektrischen Schlag verursachen zu können.

Dieses Symbol soll den Benutzer auf wichtige Instruktionen in der Bedienungsanleitung aufmerksam machen, die Handhabung und Wartung des Produkts betreffen.

VORSICHT: Risiko — Elektrischer Schlag! Nicht öffnen!
VORSICHT: Um das Risiko eines elektrischen Schlages zu vermeiden, nicht die Abdeckung enfernen. Es befinden sich keine Teile darin, die vom Anwender repariert werden könnten. Reparaturen nur von qualifiziertem Fachpersonal durchführen lassen.

ACHTUNG: Um einen elektrischen Schlag oder Feuergefahr zu vermeiden, sollte dieses Gerät nicht dem Regen oder Feuchtigkeit ausgesetzt werden. Vor Inbetriebnahme unbedingt die Bedienungsanleitung lesen.

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ENGLISH

INTRODUCTION

Congratulations on your purchase of an Architectural Acoustics ICA™ (Industrial Contractor Amplifier) from Peavey Electronics. Please read this manual carefully, especially the IMPORTANT SAFETY INSTRUCTIONS on page 18. It contains information vital to safe operation of the power amplifier. Also, please fill out and return the enclosed product registration card.

ICA Series amplifiers represent new levels of value and flexibility never before offered to the contracting market. The ICA Series features models specifically designed to drive 4-ohm outputs, 70.7-volt outputs, and 100-volt outputs. 70.7 and 100-volt outputs can be driven directly, eliminating the need for transformers or autoformers. These amplifiers cover almost every installed or distributed sound power requirement imaginable.

ICA Series amplifiers are ruggedly built from high-quality components and feature comprehensive protection circuits to protect your amplifier from those “real world” occurrences.

If you need setup or operational assistance for this product, please call the Peavey Electronics Customer Service Department or your local Peavey Electronics representative. We appreciate suggestions that may help us improve our products and/or service.

UNPACKING

Inspect the amplifier during unpacking. If you find any damage, notify your dealer immediately. Only the consignee may institute a claim with the carrier for damage incurred during shipping. Be sure to save the carton and all packing materials. Should you ever need to ship the unit back to Peavey Electronics, one of its service centers, or the dealer; use only the original factory packing.

INSTALLATION AND MOUNTING

ICA Series amplifiers are 2 or 3-rack-space units of 15 3/4" (400 mm) depth that mount in a standard 19" rack. On all amplifiers, front panel mounting holes are provided.

BASIC SETUP

1. Rack mount the amplifier in the location where it is to be used, remembering to allow for adequate access and cooling space. For more information, see the sections on INSTALLATION AND MOUNTING and COOLING REQUIREMENTS.

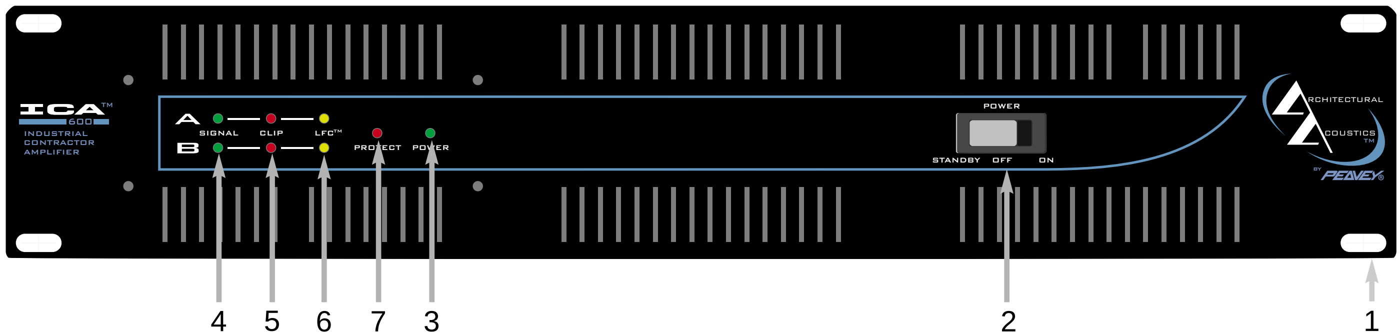
2. Make input connections to the plugable terminal blocks on the rear panel. Use the proper connections for stereo, parallel, bridged mono, and grounding configuration. See the sections on SIGNAL MODE CONFIGURATION and INPUT MODULE CONNECTIONS for more information.

3. Connect speakers to the output barrier strip. Be sure to make the correct output connections for stereo, parallel or bridged mono configuration. See the section on SPEAKER OUTPUT CONNECTIONS for more information.

4. Make power connections, allowing for proper current draw. See the sections on IEC POWER CONNECTOR and AC MAINS CIRCUIT SIZE REQUIREMENTS for more information.

5. Turn the front panel 3-position AC POWER switch to ON and bring up the back panel LEVEL (gain) attenuators to the desired levels.

FRONT PANEL FEATURES



1. **RACK MOUNTING EARS**
These mounting holes are provided on each front mounting ear.

2. **3-POSITION AC POWER SWITCH**
A 3-position switch is on the front panel. Sequential remote turn-on capability is a standard feature. With the switch pushed towards the outside position, the amplifier is ON. The middle position is OFF, and the inside position is marked STANDBY. When switched to STANDBY, the amplifier may be activated by the sequential turn-on circuit. See the section on SEQUENTIAL TURN-ON / TURN-OFF for more information.

3. **POWER LED**
The POWER LED illuminates when the amplifier is turned on.

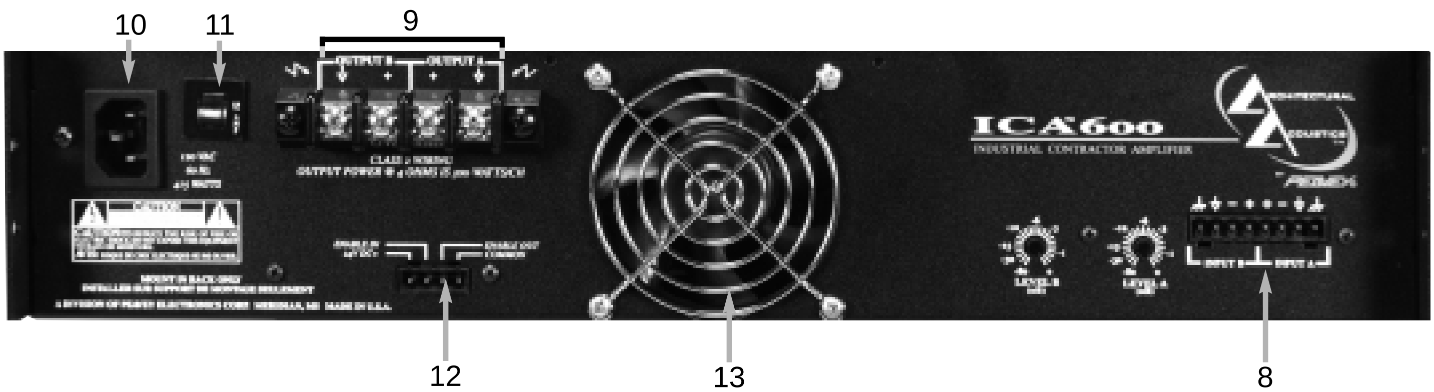
4. **SIGNAL LED**
Each channel has a SIGNAL LED that illuminates when the amplifier output exceeds 1 volt.

5. **CLIP LED**
Each channel has a CLIP LED that illuminates at the clipping point, and indicates that internal circuitry is reducing amplifier gain to allow full power. See the section on PROTECTION FEATURES for more information.

6. **LFC™ LED**
Each channel has a LFC (Load Fault Correction) LED. This LED illuminates when the amplifier channel detects an abnormal load condition. Internal circuitry will instantaneously reduce the channel gain to allow the amplifier to operate at a safe level into the abnormal load. See the section on PROTECTION FEATURES for more information.

7. **PROTECT LED**
If the amplifier has just been turned on or has detected a fault condition, the speaker output relays will open, illuminating this LED.

BACK PANEL FEATURES



8. INPUT SECTION

The ICA™ Series comes standard with plugable input connectors and individual channel rotary attenuators. Connections at the input connector permit the audio signal ground to be connected or lifted from the chassis ground.

9. OUTPUT BARRIER STRIP

A barrier strip is provided for connection of loudspeakers with bare wire or spade lug connectors. This barrier strip can accommodate up to two 10-gauge wires per terminal.

10. IEC POWER CONNECTOR

A standard IEC power connector is located at the upper left corner of the amplifier rear panel. An AC mains cord having an appropriate AC plug for the intended operating voltage is included.

NOTE: FOR UK ONLY

If the colors of the wires in the mains lead of this unit do not correspond with the colored markings identifying the terminals in your plug, proceed as follows: (1) The wire that is colored green and yellow must be connected to the terminal that is marked by the letter E, the earth symbol, colored green, or colored green and yellow. (2) The wire that is colored blue must be connected to the terminal that is marked with the letter N or the color black. (3). The wire that is colored brown must be connected to the terminal that is marked with the letter L or the color red.

11. CIRCUIT BREAKER

A resettable, protective AC circuit breaker is located at the upper left of the amplifier back panel. If the breaker has tripped, push it back in to return the amplifier to operating condition. If the breaker continues to trip, the amplifier needs servicing. Do not continue to reset the breaker because severe internal damage and safety hazards could occur!

12. SEQUENTIAL TURN-ON CONNECTOR

The ICA™ Series comes standard with remote-controllable sequential turn on enabled by setting the front power switch to STANDBY. The amplifier is activated by applying a voltage between 12 to 24 volts DC to the rear-mounted, 4-pin plugable terminal, and connecting the ENABLE terminal to the 24 V DC+ terminal. When no voltage is present or the ENABLE connection is opened, the amplifier will switch off. Other ICA Series amplifiers can be “daisy chained” by connecting all 24 V DC+ terminals together, all COMMON terminals together, and

connecting the ENABLE OUT to the ENABLE IN of the next amplifier. A mating connector is shipped with the amplifier.

13. FAN GRILL

A continuously variable-speed DC fan supplies cool air into the amplifier. **Do not block this intake!** The fan operates only when the amplifier heat sinks require cooling.

OPERATION

AC MAINS CIRCUIT SIZE REQUIREMENTS

Power requirements for ICA™ amplifiers are rated at “idle”, 1/8 power (“typical” music conditions), 1/3 power, and maximum rated power. The maximum power current draw rating is limited by the amplifier’s circuit breaker. Consult the specification sheet for the current that each amplifier will demand. AC mains voltage must be the same as that indicated on the back of the amplifier. Damage caused by connecting the amplifier to improper AC voltage is not covered by any warranty. *NOTE: Always turn off and disconnect the amplifier from the mains voltage before making audio connections. As an extra precaution, have the input attenuators turned down during initial power up.*

COOLING REQUIREMENTS

ICA Series amplifiers use a forced-air cooling system to maintain a low, even operating temperature. Cooling air is drawn by a continuously variable-speed fan mounted on the back panel, and exhausts through slots on the front panel. The fan will remain inactive until internal operating temperature rises above 45º C (113º F). Make sure there is enough space around the back of the amplifier to allow air to enter. *NOTE: If the amplifier is rack mounted, do not use doors or covers on the front or back without pressurizing the back of the rack. Whatever type of rack you are using, make sure that heated air can escape freely, and that there is no resistance to the intake of cool air through the back grill. Intake and exhaust air must flow without resistance.*

HIBERNATION™

All ICA Series amps feature Hibernation circuitry. Current draw and thermal emissions are at a minimum when the absence of input signal is sensed for more than a minute. Once signal is present, Hibernation instantly restores the amplifier to normal. Current draw specifications while Hibernation is active are included in specifications under Idle Current Draw.

THERMAL EMISSIONS

The system installer or designer should specify system cooling needs. Refer to the specifications at the back of this manual for specific thermal emissions figures.

INPUT CONNECTIONS

The input connector accepts balanced and unbalanced audio signals. For use with an unbalanced source, tie the inverting (-) input to ground by installing a jumper to the signal ground connection. If the inverting input is left floating, a 6 dB loss in gain will result.

SIGNAL MODE CONFIGURATION

ICA™ Series amplifiers are configured for Stereo (2-channel), Bridged Mode, or Parallel Mode operation at the input connector.

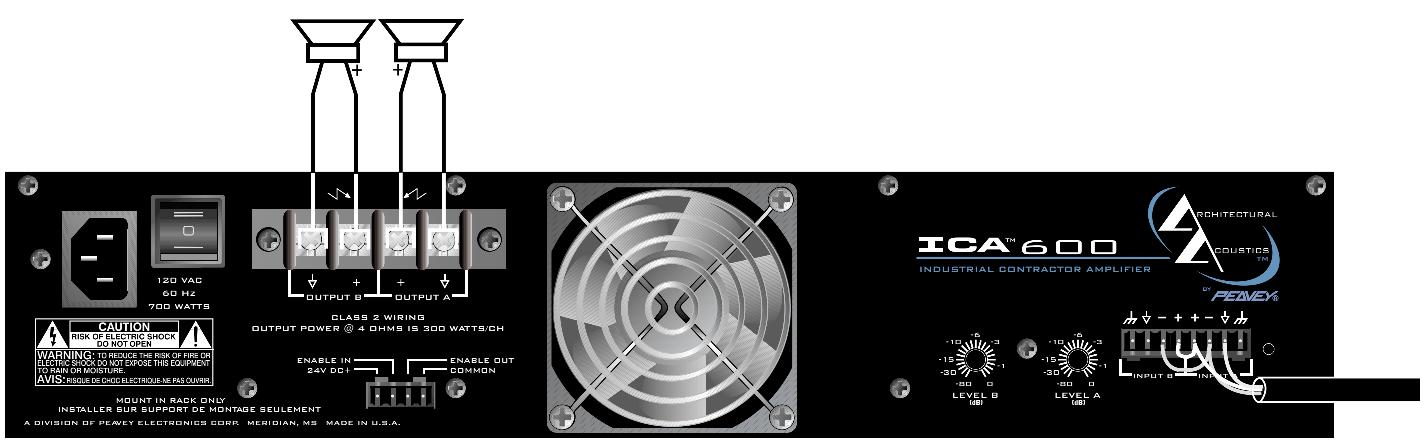
To send the same signal to both channels (Parallel Mode), connect the input signal to CHANNEL A via the input connector. Run jumpers from the positive and negative terminals of the CHANNEL A input connector to the respective terminals of CHANNEL B. Both channels then share the CHANNEL A input signal but will operate independently. Speakers are connected as in Stereo Mode.

Bridged Mode converts the amplifier into a single-channel unit with a power rating equal to the sum of both channel power ratings, and at a load rating twice that of the single-channel rating. In Bridged Mode, the channels operate at opposite polarity of each other so that one channel "pushes" and the other "pulls" equally. Signal is connected to the input connector with one jumper connecting the positive (+) terminal of Input A to the negative (-) terminal of Input B, and another jumper connecting the negative (-) terminal of Input A to the positive (+) terminal of Input B. Both channel attenuators (A & B) are used to control signal level, and both must be at the same level, preferably at 0 dB attenuation. The speakers are connected only to the designated "+" output terminals. **NEVER ground either side of the speaker cable when the amplifier is in Bridged Mode as both sides are "hot".** If an output patch panel is used, all connections must be isolated from each other and from the panel. For ICA Series amplifiers, the minimum nominal load impedance in Bridged Mode is 8 ohms; this is the equivalent of driving both channels at 4 ohms. Driving loads of less than 8 ohms may activate the LFC circuit and may also cause a thermal protect condition. ***NOTE:*** Regardless of operating mode, **NEVER connect amplifier outputs together!**

STEREO MODE CONNECTION DIAGRAM



PARALLEL MODE DIAGRAM



BRIDGED MODE DIAGRAM



SPEAKER OUTPUT CONNECTIONS

Speakers are connected using the output barrier strip connectors. Spade lugs, ring tongues or bare wire may be connected to the output barrier strip elements. The barrier strip can accommodate up to two 10-guage wires per terminal. *Make sure the amplifier is turned off before you change any output connections or jumpers.* Consult the Wire Gauge Chart at the back of this manual to find a suitable wire gauge to minimize losses of power in the speaker cables. Also, make sure that the load impedance is not lower than that rated for the amplifier.

SIGNAL GROUND CONNECTION

Connections at the input connector permit the audio signal ground to be connected or lifted from the chassis ground. When possible, the shield of the signal source connecting cable should connect to the chassis ground. In some cases, however, particularly if an amplifier is being installed in an existing system, this may result in a ground loop. If this happens, connect the shield to the signal ground only. The chassis ground also connects to the AC ground internally. If the cable shield is connected to the signal ground only, it will be clamped to +/- 0.6 V above or below chassis/AC ground.

PROTECTION FEATURES

The ICA™ Series incorporates protection features derived from Peavey's extensive experience with reliability. The amplifiers are ruggedly built from high-quality components and feature comprehensive protection circuits to protect your amplifier from those "real world" occurrences.

CLIP LIMITING

At the amplifier's full power, or clipping point, the channel gain will automatically be reduced, guarding the loudspeakers against damaging high power and continuous square waves that would otherwise be produced. This is indicated by illumination of the CLIP LED. Normal program transients will not trigger Clip Limiting, only steady or excessive clipping will. Operation is virtually transparent in use and full signal bandwidth is maintained.

LOAD FAULT CORRECTION™

LFC is an innovative circuit that will instantaneously reduce channel gain to allow the amplifier to operate at a safe level into an abnormal load. LFC activation is indicated by illumination of the LFC LED. Moderate activation of LFC is inaudible in normal use. In addition, if extreme low impedance or a short circuit is encountered during high signal level conditions, the amplifier's output relay will open.

FADE-IN PROTECTION

This feature operates every time the amplifier is turned on, or after a protect condition. During turn on, the amplifier goes into protect mode and leaves the speaker load disconnected until the amplifier determines that the operating status is normal. The Fade-In circuit attenuates the signal during the initial turn on or protect operation. After relay release, channel gain gradually increases to the attenuator setting to avoid unnecessary stress on the loudspeakers.

THERMAL PROTECTION

If the heatsink or power transformer reaches an abnormally high temperature, the amplifier will protect itself by disconnecting the speaker load until the amplifier returns to a normal temperature. During this time, the PROTECT LED will illuminate, and the cooling fan will operate at maximum speed.

SHORT CIRCUIT

If an output is shorted, the LFC™, speaker relay and thermal circuits will automatically protect the amplifier. The LFC circuit senses the short circuit as an abnormal load condition and reduces the channel gain to a safe level for the load. In extreme or severe conditions, the speaker relays will disconnect the load and initiate a power-on start-up sequence.

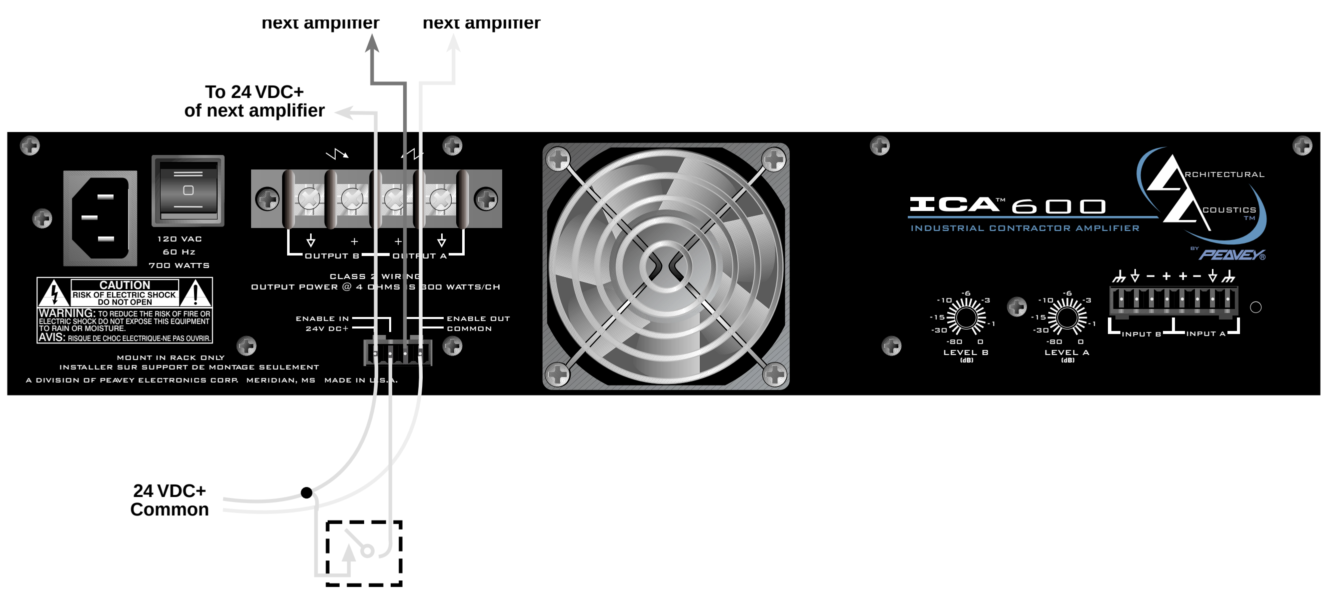
DC VOLTAGE PROTECTION

If an amplifier channel detects DC voltage or subsonic signals at its output terminals, the speaker relay will immediately open to prevent loudspeaker damage. The PROTECT LED will illuminate as notification of this condition.

SEQUENTIAL TURN-ON / TURN-OFF

The ICA™ Series comes standard with remote sequential turn-on. The amplifier front power switch is set to STANDBY. An external direct plug-in power supply unit providing a nominal voltage between 12 to 24 volts DC must be applied to the 4-pin plugable terminal on the rear panel. The ENABLE OUT is connected to the ENABLE IN of the next amplifier. ICA Series amplifiers are bussed or "daisy chained" together in parallel and connected to the DC supply by connecting all 24 V DC+ terminals together and all COMMON terminals together. The first amplifier in the chain requires an SPST closure between its 24 V DC+ terminal and ENABLE OUT terminal to initiate the power turn-on sequence and keep the amplifiers in the chain powered on.

Sequential Turn-On / Turn-Off Wiring



WIRE GAUGE CHART

Cable Length (Feet)	Stranded Wire Gauge (AWG)	Power Loss Into 8 ohms	Power Loss Into 4 ohms	Power Loss Into 2 ohms
5'	18 AWG	.79%	1.58%	3.16%
	16	.5	1.0	2.0
	14	.31	.62	1.24
	12	.20	.40	.80
	10	.125	.25	.50
10'	18 AWG	1.58%	3.16%	6.32%
	16	1.0	2.0	4.00
	14	.62	1.25	2.50
	12	.40	.80	1.6
	10	.25	.50	1.0
40'	18 AWG	8.0%	12.6%	25.2%
	16	4.0	8.0	16.0
	14	2.5	5.0	10.0
	12	1.60	3.2	6.4
	10	1.0	2.0	4.0
	8	.625	1.25	2.50
80'	16 AWG	8.0%	16.0%	32.0%
	14	5.0	10.0	20.0
	12	3.2	6.4	12.8
	10	2.0	4.0	8.0

ICA™ 600 SPECIFICATIONS

Rated Power (2 X 4 ohms):
300 watts @ 20 Hz - 20 kHz, both channels driven at < 0.1% THD

Rated Power (2 x 8 ohms):
200 watts @ 20 Hz - 20 kHz at < 0.05% THD

Rated Power (1 x 4 ohms):
360 watts @ 1 kHz at < 0.015% THD

Rated Power (1 x 8 ohms):
275 watts @ 1 kHz at < 0.005% THD

Minimum Load Impedance:
4 ohms

Maximum RMS Voltage Swing:
57 volts

Frequency Response:
10 Hz - 25 kHz; +0, -3 dB at 1 watt

Power Bandwidth:
10 Hz - 100 kHz; +0, -3 dB at rated power

THD (2 x 4 ohms):
<0.1% @ 300 W from 20 Hz - 20 kHz with both channels driven

THD (2 x 8 ohms):
<0.05% @ 200 W from 20 Hz - 20 kHz with both channels driven

THD (1 x 4 ohms):
<0.01% @ 350 W @ 1 kHz

THD (1 x 8 ohms):
<0.005% @ 275 W @ 1 kHz

SMPTE IMD:
<0.1% 60 Hz and 7 kHz, 300 W @ 4 ohms

Slew Rate:
30 V/µs

Damping Factor (8 ohms):
>450:1 @ 20 Hz - 1 kHz

Input CMRR:
>-65 dB @ 1 kHz

Voltage Gain:
x40 (32 dB)

Input Sensitivity:
.866 volts @ 4 ohms, 1 volt @ 8 ohms

Input Impedance:
20 k ohms, balanced

Hum and Noise:
>-108 dB, “A” weighted referenced to rated power @ 8 ohms

Crosstalk:
>-75 dB, “A” weighted referenced to rated power @ 8 ohms

Current Draw @ 1/8 power:
670 watts @ 4 ohms, 460 watts @ 8 ohms

Current Draw @ 1/3 power:
1,055 watts @ 4 ohms, 650 watts @ 8 ohms

Idle Current Draw:
30 watts in Standby Mode

Maximum Current Draw:
1,622 watts @ 4 ohms, 1,010 watts @ 8 ohms

Thermal Emissions (BTU/hr.):
625 @ 1/3 power 4 ohms,
500 @ 1/3 power 8 ohms,
395 @ 1/8 power 4 ohms,
350 @ 1/8 power 8 ohms

Cooling:
80 mm DC fan, off until heatsinks reach 45° C, then variable speed

Controls:
2 rear panel attenuators, sequential turn-on / off

Indicator LEDs:
2 Clip, 2 Signal, 2 LFC, 1 Protect, 1 Power

Protection:
Temp., DC, turn-on bursts, subsonic, incorrect load or short

Connectors:
8-pin plugable signal input, 4-pin plugable sequential power, 4-terminal barrier strip, IEC AC power connector

Construction:
All steel; 16 ga. chassis, 18 ga. top, 12 ga. rack ears

Dimensions:
3.48" x 19" x 16.4"
88.4 mm x 483 mm x 416.6 mm

Gross Weight:
33.6 lbs. (15.25 kg)

Net Weight:
30.2 lbs. (13.7 kg)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

ICA™ 1200 SPECIFICATIONS

Rated Power (2 X 4 ohms):
600 watts @ 20 Hz - 20 kHz, both channels driven at < 0.1% THD

Rated Power (2 X 8 ohms):
400 watts @ 20 Hz - 20 kHz, both channels driven at < 0.05% THD

Rated Power (1 X 4 ohms):
700 watts @ 1 kHz at < 0.008% THD

Rated Power (1 X 8 ohms):
425 watts @ 1 kHz at < 0.005% THD

Minimum Load Impedance:
4 ohms

Maximum RMS Voltage Swing:
70 volts

Frequency Response:
10 Hz - 25 kHz; +0, -.3 dB at 1 watt

Power Bandwidth:
10 Hz - 100 kHz; +0, -3 dB at rated power

THD (2 x 4 ohms):
<0.1% @ 600 W from 20 Hz - 20 kHz with both channels driven

THD (2 x 8 ohms):
<0.05% @ 400 W from 20 Hz - 20 kHz with both channels driven

THD (1 X 4 ohms):
<0.008% @ 700 W @ 1 kHz

THD (1 X 8 ohms):
<0.005% @ 425 W @ 1 kHz

SMPTE IMD:
<0.1% 60 Hz and 7 kHz, 600 W @ 4 ohms

Slew Rate:
30 V/µs

Damping Factor (8 ohms):
>350:1 @ 20 Hz - 1 kHz

Input CMRR:
>-65 dB @ 1 kHz

Voltage Gain:
x40 (32 dB)

Input Sensitivity:
1.22 volts @ 4 ohms, 1.41 volts @ 8 ohms

Input Impedance:
20 k ohms, balanced

Hum and Noise:
>-110 dB, "A" weighted referenced to rated power

Crosstalk:
>-65 dB, "A" weighted referenced to rated power

Current Draw @ 1/8 power:
950 watts @ 4 ohms, 725 watts @ 8 ohms

Current Draw @ 1/3 power:
1,750 watts @ 4 ohms, 1,150 watts @ 8 ohms

Idle Current Draw:
32 watts in Standby Mode

Maximum Current Draw:
2,670 watts @ 4 ohms (time limited by breaker), 1,725 watts @ 8 ohms

Thermal Emissions (BTU/hr.):
1,100 @ 1/3 power 4 ohms,
850 @ 1/3 power 8 ohms,
635 @ 1/8 power 4 ohms,
540 @ 1/8 power 8 ohms

Cooling
120 mm DC fan, off until heatsinks reach 45° C, then variable speed

Controls:
2 rear panel attenuators, sequential turn-on / off

Indicator LEDs:
2 Clip, 2 Signal, 2 LFC, 1 Protect, 1 Power

Protection:
Temp., DC, turn-on bursts, subsonic, incorrect load or short

Connectors:
8-pin plugable signal input, 4-pin plugable sequential power,
4-terminal barrier strip, IEC AC power connector

Construction:
All steel; 16 ga. chassis, 18 ga. top, 12 ga. rack ears

Dimensions:
5.25" x 19" x 16.4"
133 mm x 483 mm x 416.6 mm

Gross Weight:
51.4 lbs. (23.3 kg)

Net Weight:
45 lbs. (20.4 kg)

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ICA™ 2400 SPECIFICATIONS

Rated Power (2 x 4 ohms):
1200 watts @ 20 Hz - 20 kHz both channels driven at < 0.1% THD

Rated Power (2 x 8 ohms):
800 watts @ 20 Hz – 20 kHz both channels driven at < 0.08% THD

Rated Power (1 x 4 ohms):
1325 watts @ 1 kHz at < 0.08% THD

Rated Power (1 x 8 ohms):
830 watts @ 1 kHz at < 0.08% THD

Topology:
Class H

Minimum Load Impedance:
4 ohms

Maximum RMS Voltage Swing:
95 volts

Frequency Response:
10 Hz – 25 kHz; +0, -.3 dB at 1 watt

Power Bandwidth:
10 Hz – 50 kHz; +0, -3 dB at rated power

THD (2 x 4 ohms):
<0.025% @ 1200 W @ 1 kHz with both channels driven

THD (2 x 8 ohms):
<0.008% @ 800 W @ 1 kHz with both channels driven

THD (1 x 4 ohms):
<0.015% @ 1325 W @ 1kHz

THD (1 x 8 ohms):
<0.006% @ 830 W @ 1kHz

SMPTE IMD:
<0.1% 60 Hz and 7 kHz, 800 W @ 8 ohms

Slew Rate:
35 V/us

Damping Factor (8 ohms):
>250:1 @ 20 Hz – 1 kHz

Input CMRR:
> 65 dB @ 1 kHz

Voltage Gain:
x 40 (32 dB)

Input Sensitivity:
1.73 volts @ 4 ohms, 2 volts @ 8 ohms

Input Impedance:
20 k ohms, balanced

Hum and Noise:
>-115 dB, “A” weighted referenced to rated power @ 8 ohms

Crosstalk:
>-55 dB, “A” weighted referenced to rated power @ 8 ohms

Current Draw @ 1/8 power:
575 watts @ 4 ohms, 380 watts @ 8 ohms

Current Draw @ 1/3 power:
1185 watts @ 4 ohms, 860 watts @ 8 ohms

Idle Current Draw:
35 VA in Standby Mode

Maximum Current Draw:
2,760 VA (time limited by breaker)

Thermal Emissions (BTU/hr.):
940 @ 1/8 power 4 ohms,
615 @ 1/8 power 8 ohms,
1830 @ 1/3 power 4 ohms,
1335 @ 1/3 power @ 8 ohms

Cooling:
120 mm DC fan, off until heatsinks reach 45° C, then variable speed

Controls:
2 rear panel attenuators, sequential turn-on / off

Indicator LEDs:
2 Clip, 2 Signal, 2 LFC, 1 Protect, 1 Power

Protection:
Temp., DC, turn-on bursts, subsonic, incorrect load or short

Connectors:
8-pin plugable signal input, 4-pin plugable sequential power, 4-terminal barrier strip, IEC AC power connector

Construction:
All steel; 16 ga. chassis, 18 ga. top, 12 ga. rack ears

Dimensions:
5.25" x 19" x 16.4"
133 mm x 483 mm x 416.6 mm,

Gross Weight:
51.4 lbs. (23.3 kg.)

Net Weight:
45 lbs. (20.4 kg.)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

ICA™ 400V SPECIFICATIONS

Rated Power (two channels):
200 watts @ 20 Hz - 20 kHz both channels driven at <0.1% THD

Rated Power (one channel):
215 watts @ 1 kHz at <0.0075% THD

Minimum Load Impedance:
ICA 400V-70: 25 ohms
ICA 400V-100: 50 ohms

Maximum RMS Voltage Swing:
ICA 400V-70: 86 volts
ICA 400V-100: 116 volts

Frequency Response:
10 Hz - 25 kHz; +0, -.3 dB at 1 watt

Power Bandwidth:
ICA 400V-70:
10 Hz - 100 kHz; +0, -3 dB at rated power
ICA 400V-100:
10 Hz - 50 kHz; +0, -.3 dB at rated power

THD (two channels driven):
ICA 400V-70:
<0.1% @ 200 W from 20 Hz - 20 kHz with both channels driven
ICA 400V-100:
<0.15% @ 200 W from 20 Hz - 20 kHz with both channels driven

THD (one channel driven):
ICA 400V-70:
<0.005% @ 200 W @ 1 kHz
ICA 400V-100:
<0.015% @ 200 W @ 1 kHz

SMPTE IMD:
<0.1% 60 Hz and 7 kHz, 200 W

Slew Rate:
ICA 400V-70: 30 V/µs
ICA 400V-100: 40 V/µs

Damping Factor:
ICA 400V-70:
>1,000:1 @ 20 Hz - 400 Hz
ICA 400V-100:
>2,000:1 @ 20 Hz - 400 Hz

Input CMRR:
> -65 dB @ 1 kHz

Voltage Gain:
x40 (32 dB)

Input Sensitivity:
ICA 400V-70:
1.77 volts for rated output
ICA 400V-100:
2.5 volts for rated output

Input Impedance:
20 k ohms, balanced

Hum and Noise:
> -110 dB, "A" weighted referenced to rated power

Crosstalk:
ICA 400V-70:
>-70 dB, "A" weighted referenced to rated power
ICA 400V-100:
>-65 dB, "A" weighted referenced to rated power

Current Draw @ 1/8 power:
ICA 400V-70: 415 watts
ICA 400V-100: 385 watts

Current Draw @ 1/3 power:
ICA 400V-70: 600 watts
ICA 400V-100: 565 watts

Idle Current Draw:
ICA 400V-70:
38 watts in Standby Mode
ICA 400V-100:
43 watts in Standby Mode

Maximum Current Draw:
ICA 400V-70:
970 watts for rated power
ICA 400V-100:
840 watts for rated power

Thermal Emissions (BTU/hr.):
500 @ 1/3 power,
350 @ 1/8 power

Cooling:
80 mm DC fan, off until heatsinks reach 45°C, then variable speed

Controls:
2 rear panel attenuators, sequential turn-on / off

Indicator LEDs:
2 Clip, 2 Signal, 2 LFC, 1 Protect, 1 Power

Protection:
Temp., DC, turn-on bursts, subsonic, incorrect load or short

Connectors:
8-pin plugable signal input, 4-pin plugable sequential power, 4-terminal barrier strip, IEC AC power connector

Construction:
All steel; 16 ga. chassis, 18 ga. top, 12 ga. rack ears

Dimensions:
3.48" x 19" x 16.4"
88.4 mm x 483 mm x 416.6 mm

Gross Weight:
33.5 lbs. (15.2 kg.)

Net Weight:
31 lbs. (14 kg.)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

ICA™ 800V SPECIFICATIONS

Rated Power (two channels):
400 watts @ 20 Hz - 20 kHz both channels driven at < 0.1% THD

Rated Power (one channel):
415 watts @ 1 kHz at < 0.01% THD

Minimum Load Impedance:
ICA 800V-70: 12.5 ohms
ICA 800V-100: 25 ohms

Maximum RMS Voltage Swing:
ICA 800V-70: 85 volts
ICA 800V-100: 110 volts

Frequency Response:
10 Hz - 25 kHz; +0, -.3 dB at 1 watt

Power Bandwidth:
ICA 800V-70:
10 Hz - 100 kHz; +0, -3 dB at rated power
ICA 800V-100:
10 Hz - 50 kHz; +0, -3 dB at rated power

THD (two channels driven):
ICA 800V-70:
<0.15% @ 400 W from 20 Hz - 20 kHz with both channels driven
ICA 800V-100:
<0.1% @ 400 W from 20 Hz - 20 kHz with both channels driven

THD (one channel driven):
<0.008% @ 400 W @ 1 kHz

SMPTE IMD:
<0.1% 60 Hz and 7 kHz, @ 400 W

Slew Rate:
35 V/µs

Damping Factor:
>400:1 @ 20 Hz - 400 Hz

Input CMRR:
>-65 dB @ 1 kHz

Voltage Gain:
x40 (32 dB)

Input Sensitivity:
ICA 800V-70:
1.77 volts for rated output
ICA 800V-100:
2.5 volts for rated output

Input Impedance:
20 k ohms, balanced

Hum and Noise:
> -108 dB, "A" weighted referenced to rated power

Crosstalk:
> -65 dB, "A" weighted referenced to rated power

Current Draw @ 1/8 power:
ICA 800V-70: 765 watts
ICA 800V-100: 775 watts

Current Draw @ 1/3 power:
ICA 800V-70: 1,100 watts
ICA 800V-100: 1,150 watts

Idle Current Draw:
45 watts in Standby Mode

Maximum Current Draw:
ICA 800V-70:
1,680 watts for rated power
ICA 800V-100:
1,700 watts for rated power

Thermal Emissions (BTU/hr.):
550 @ 1/8 power,
835 @ 1/3 power

Cooling:
120 mm DC fan, off until heatsinks reach 45°C, then variable speed

Controls:
2 rear panel attenuators, sequential turn-on / off

Indicator LEDs:
2 Clip, 2 Signal, 2 LFC, 1 Protect, 1 Power

Protection:
Temp., DC, turn-on bursts, subsonic, incorrect load or short

Connectors:
8-pin plugable signal input, 4-pin plugable sequential power, 4-terminal barrier strip, IEC AC power connector

Construction:
All steel; 16 ga. chassis, 18 ga. top, 12 ga. rack ears

Dimensions:
5.25" x 19" x 16.4"
133 mm x 483 mm x 416.6 mm

Gross Weight:
51.4 lbs. (23.3 kg.)

Net Weight:
45 lbs. (20.4 kg.)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

ICA™ 2400V SPECIFICATIONS

Rated Power (2 x 4 ohms):
1200 watts @ 20 Hz - 20 kHz both channels driven at < 0.1% THD

Rated Power (2 x 8 ohms):
800 watts @ 20 Hz – 20 kHz both channels driven at < 0.08% THD

Rated Power (1 x 4 ohms):
1325 watts @ 1 kHz at < 0.08% THD

Rated Power (1 x 8 ohms):
830 watts @ 1 kHz at < 0.08% THD

Topology:
Class H

Minimum Load Impedance:
4 ohms

Maximum RMS Voltage Swing:
95 volts

Frequency Response:
10 Hz – 25 kHz; +0, -.3 dB at 1 watt

Power Bandwidth:
10 Hz – 50 kHz; +0, -3 dB at rated power

THD (2 x 4 ohms):
<0.025% @ 1200 W @ 1 kHz with both channels driven

THD (2 x 8 ohms):
<0.008% @ 800 W @ 1 kHz with both channels driven

THD (1 x 4 ohms):
<0.015% @ 1325 W @ 1kHz

THD (1 x 8 ohms):
<0.006% @ 830 W @ 1kHz

SMPTE IMD:
<0.1% 60 Hz and 7 kHz, 800 W @ 8 ohms

Slew Rate:
35 V/us

Damping Factor (8 ohms):
>250:1 @ 20 Hz – 1 kHz

Input CMRR:
> 65 dB @ 1 kHz

Voltage Gain:
x 40 (32 dB)

Input Sensitivity:
1.73 volts @ 4 ohms, 2 volts @ 8 ohms

Input Impedance:
20 k ohms, balanced

Hum and Noise:
>-115 dB, "A" weighted referenced to rated power @ 8 ohms

Crosstalk:
>-55 dB, "A" weighted referenced to rated power @ 8 ohms

Current Draw @ 1/8 power:
575 watts @ 4 ohms, 380 watts @ 8 ohms

Current Draw @ 1/3 power:
1185 watts @ 4 ohms, 860 watts @ 8 ohms

Idle Current Draw:
35 VA in Standby Mode

Maximum Current Draw:
2,760 VA (time limited by breaker)

Thermal Emissions (BTU/hr.):
940 @ 1/8 power 4 ohms,
615 @ 1/8 power 8 ohms,
1830 @ 1/3 power 4 ohms,
1335 @ 1/3 power @ 8 ohms

Cooling:
120 mm DC fan, off until heatsinks reach 45° C, then variable speed

Controls:
2 rear panel attenuators, sequential turn-on / off

Indicator LEDs:
2 Clip, 2 Signal, 2 LFC, 1 Protect, 1 Power

Protection:
Temp., DC, turn-on bursts, subsonic, incorrect load or short

Connectors:
8-pin plugable signal input, 4-pin plugable sequential power, 4-terminal barrier strip, IEC AC power connector

Construction:
All steel; 16 ga. chassis, 18 ga. top, 12 ga. rack ears

Dimensions:
5.25" x 19" x 16.4"
133 mm x 483 mm x 416.6 mm,

Gross Weight:
51.4 lbs. (23.3 kg.)

Net Weight:
45 lbs. (20.4 kg.)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

ESPAÑOL

INTRODUCCIÓN

Felicidades en su compra de un amplificador de Acústica Arquitectónica ICA™ (Amplificador de Contratistas Acústicos por sus siglas en Inglés) de Peavey Electronics. Por favor lea este manual con atención, especialmente la seccione de SEGURIDAD en la página 18. Esta contiene información vital para la operación segura del amplificador. Por favor tómese el tiempo de llenar y mandar su tarjeta de registro del producto.

La serie de amplificadores ICA presenta nuevos niveles de valor y flexibilidad nunca antes ofrecidos en el mercado de contratistas. La serie ICA incluye modelos específicamente diseñados para alimentar salidas de 4 ohmios, salidas de 70.7 voltios y salidas de 100 voltios. Las salidas de 70.7 voltios y 100 voltios pueden ser alimentadas directamente, eliminando la necesidad de transformadores. Estos amplificadores cubren casi todas las necesidades de distribución o instalación de poder de sonido imaginables.

Los amplificadores de la serie ICA han sido construidos para que sean durables con materiales de alta calidad para proporcionar la protección requerida a los circuitos y proteger al amplificador de situaciones “de la vida real”.

Si requiere información adicional o asistencia en la operación de este producto, por favor llame al Departamento de Servicio al Cliente de Peavey Electronics o su representante de Peavey local. Las sugerencias que nos ayuden a mejorar nuestros productos siempre son bienvenidas.

DESEMPACAR

Por favor inspeccione el amplificador cuando lo desempaque. Si encuentra algún daño, informé a su distribuidor inmediatamente. Sólo el consignatario puede llevar a cabo un reclamo con el transportista en caso que se hayan experimentado daños durante el flete. Asegúrese de guardar la caja y todos los materiales de empaque. Si alguna vez fuera necesario enviar el producto Peavey Electronics o alguno de sus centros de servicio, o distribuidores, use sólo los materiales de empaque originales.

INSTALACIÓN Y MONTURA

Los amplificadores de la serie ICA son unidades de 2 ó 3 espacios de rack con 15 3/4" (400 mm) de profundidad que se pueden montar en un rack estándar de 19". En todos los amplificadores se proporcionan agujeros al frente para montar la unidad.

INSTALACIÓN BÁSICA

1. Acomode el amplificador en el espacio de rack donde lo quiera instalar, asegurándose de mantener suficiente espacio de acceso, así como de ventilación de enfriamiento. Para más información, ver las secciones de Instalación y Montura y Requisitos de Enfriamiento.

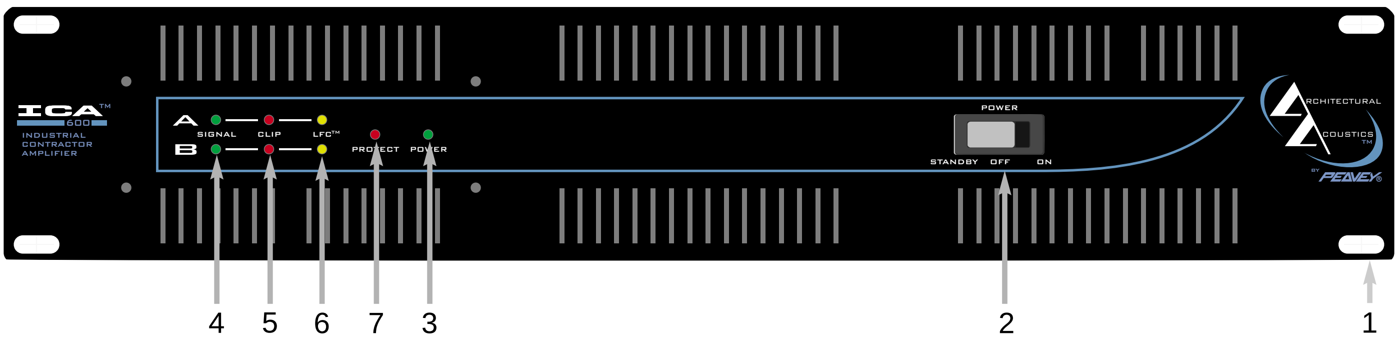
2. Lleve a cabo las conexiones de entrada necesarias en los bloques de terminales del panel trasero. Use las conexiones apropiadas para funcionamiento estéreo, paralelo, mono (en puente), y configuración de tierra. Vea la sección de Configuración de Modos de Señal y Módulo de Conexiones de Entrada para más información.

3. Conecte las bocinas o altavoces al módulo de salida. Asegúrese de llevar a cabo las conexiones correctas para estéreo, paralelo o mono/puente. Vea la sección Conectores de Salida de Bocinas para más información.

4. Lleve a cabo las conexiones de poder, cubriendo las necesidades del amplificador. Vea las secciones CONECTOR IEC y Requisitos de los circuitos de CA para más información.

5. Gire el interruptor de poder (AC POWER) de tres posiciones a la posición ON y suba los atenuadores de ganancia (LEVEL) en el panel trasero a los niveles deseados.

CARACTERÍSTICAS DEL PANEL FRONTAL



1. INSTALADOR PARA RACK
Estos agujeros se proporcionan en todas las unidades para su instalación.

2. INTERRUPTOR DE PODER (AC POWER) DE TRES POSICIONES
Un interruptor de poder de tres posiciones se encuentra en el panel frontal. La capacidad de encender secuencialmente de forma remota es estándar. Con el interruptor presionado hacia la posición de afuera, el amplificador está encendido. La posición del medio es apagado y la posición adentro es STANDBY. Cuando se selecciona STANDBY el amplificador puede ser activado por circuitos de encendido secuenciales. Vea la sección Encendido/Apagado secuencial para más información.

3. LED DE PODER
El LED de poder se enciende cuando el amplificador está encendido.

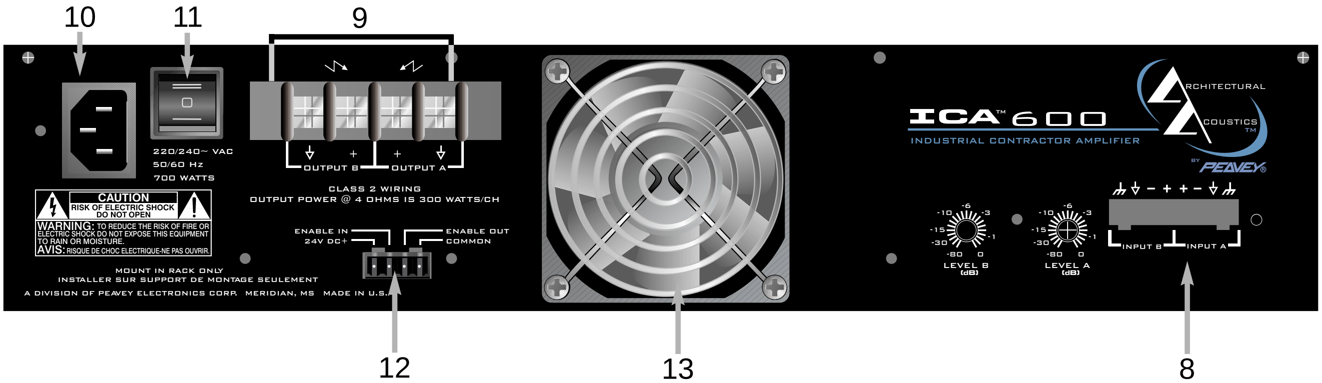
4. LED DE SEÑAL
Cada canal cuenta con un LED de señal que se ilumina cuando el amplificador excede 1 voltio.

5. LED DE CLIP
Cada canal cuenta con un LED de clip que se ilumina en el punto de saturación, e indica que los circuitos internos están reduciendo la ganancia del amplificador para permitir el uso de todo el poder. Vea la sección sobre Protección para más información.

6. LFC™ LED
Cada canal cuenta con un LED de LFC (Corrección de Carga Fallida, por sus siglas en Inglés). Este LED se enciende cuando el canal del amplificador detecta una carga de condiciones anormales. Los circuitos internos instantáneamente reducen la ganancia del canal para permitir que el amplificador opere a un nivel seguro a pesar de la carga anormal. Vea la sección sobre Protección para más información.

7. LED DE PROTECCIÓN
Si el amplificador acaba de ser encendido o ha detectado una condición fallida, los relays de salida se abrirán, iluminando este LED.

CARACTERÍSTICAS DEL PANEL TRASERO



8. SECCIÓN DE ENTRADA
La serie ICA cuenta con conectores de entrada y atenuadores rotativos individuales para cada canal como equipamiento estándar. Las conexiones en los conectores de entrada permiten que la tierra de la señal de audio sea conectada o levantada de la tierra del chasis.

9. CONECTORES DE SALIDA DE PARA CABLES
Se ha proporcionado una sección a la que se pueden conectar cables pelados para bocinas. Estas secciones pueden alimentar hasta 2 cables de medida 10 por conector.

10. Conector de Poder IEC
Un conector de poder IEC estándar está localizado en la parte superior izquierda del panel trasero del amplificador. Se incluye un cable de CA que cuenta con la capacidad de voltaje requerida para operar la unidad.

11. Fusible
Hay un fusible protector de CA que está localizado en la parte superior izquierda del panel trasero del amplificador. Si el fusible salta, presiónelo a su posición inicial para regresar el amplificador a modo de operación normal. Si el fusible sigue saltando, el amplificador necesita servicio. No continúe presionando el fusible, ya que esto puede resultar en serios daños internos además de crear situaciones peligrosas.

12. Interruptor de Encendido Secuencial
La serie ICA™ viene equipada con encendido secuencial de control remoto activado al seleccionar la posición STANDBY en el interruptor frontal. El amplificador será activado al aplicarle un voltaje entre 12 y 24 voltios CD a la terminal trasera de 4 pins, y al haber conectado la terminal ENABLE al la terminal de +24 voltios CD. Cuando no hay voltaje presente o la conexión ENABLE es abierta, el amplificador se apagará. Otros amplificadores ICA pueden ser conectados en serie (daisy-chain) conectando todas las terminales de +24 voltios CD juntas, todas las terminales COMMON juntas, y conectando las salidas ENABLE OUT a las entradas ENABLE IN del siguiente amplificador. Un conector para este tipo de conexiones es incluido con el amplificador.

13. Rejilla del Ventilador
Un ventilador continuo de CD provee aire fresco al amplificador. Nunca bloquee esta entrada. El ventilador opera únicamente cuando el amplificador requiere enfriamiento.

OPERACIÓN

REQUISITOS DE TAMAÑO DE CIRCUITO DE CA

Los requisitos de poder para los amplificadores ICA™ han sido calculados en estado “Idle”, a 1/8 de poder (condiciones de música ‘típicas’), 1/3 de poder y poder máximo. El máximo de poder requerido es limitado por el interruptor (breaker) del circuito. Consulte las fichas de especificaciones para conocer las necesidades de corriente de cada amplificador. Los daños que sean resultado de conectar el amplificador a fuentes inapropiadas no son cubiertos por ninguna garantía. *NOTA: Siempre apague y desconecte el amplificador de la corriente antes de llevar a cabo conexiones de audio. Como una medida adicional de precaución, tenga los atenuadores de entrada al mínimo al encender.*

REQUISITOS DE ENFRIAMIENTO

Los amplificadores de la serie ICA usan un sistema de enfriamiento por medio de aire forzado para mantener una temperatura baja y uniforme incluso durante su operación. El aire de enfriamiento es introducido por medio de un ventilador continuo de velocidad variable montado en el panel trasero, y sale por las aberturas en el panel frontal. El ventilador se mantendrá apagado hasta que la temperatura de operación alcance los 45º C (113º F). Asegúrese que exista suficiente espacio alrededor del panel trasero del amplificador para permitir que el aire pase. *NOTA: Si el amplificador está instalado en un rack no use puertas o paneles de cobertura en la parte trasera o frontal sin presurizar la parte trasera del rack. Sea cual sea el tipo de rack que use, asegúrese que el aire caliente pueda escapar libremente, y que no exista resistencia a la entrada de aire frío por la parrilla trasera. Tanto el aire que entra como el que sale deben fluir sin resistencia.*

HIBERNACIÓN (HIBERNATION™)

Todos los amplificadores de la serie ICA incluyen circuitos de Hibernación. Las necesidades de corriente y las emisiones termales son mínimas cuando se identifica que no existe señal de entrada por más de un minuto. Una vez que la señal está presente la Hibernación inmediatamente regresa el amplificador a modo de operación normal. Las especificaciones de requisitos de corriente durante la Hibernación están incluidas en las especificaciones bajo Requisitos de Corriente en bajo uso.

EMISIONES TÉRMICAS

El instalador o diseñador debe especificar las necesidades de enfriamiento. Haga referencia a las fichas de especificaciones en la parte trasera de este manual para cifras específicas de emisiones térmicas.

CONEXIONES DE ENTRADA

Las conexiones de entrada aceptan señales de audio tanto balanceadas como no balanceadas. Para usarse con una fuente no balanceada, se debe amarrar la entrada invertida (-) a tierra instalando un cable a la tierra de la señal. Si la entrada se deja flotando, el resultado será una pérdida de 6 dB.

CONFIGURACIÓN DE MODO DE SEÑAL

Los amplificadores de la serie ICA™ han sido configurados en Estéreo (2 canales), Modo Puenteado o Modo de operación en Paralelo en las entradas.

Para mandar la misma señal a los dos canales (modo paralelo), conecte la señal de entrada al CANAL A por medio de su conexión de entrada. Conecte cables de las terminales positiva y negativa de la conexión del CANAL A a las conexiones de las terminales respectivas del CANAL B.

Ahora los dos canales comparten la señal del CANAL A, pero operarán independientemente. Las bocinas son conectadas en modo estéreo.

El Modo “Puenteado” (Bridged) convierte el amplificador en una unidad de un solo canal con una capacidad de poder igual a la suma de los dos canales, y con una carga del doble que la de un solo canal. En Modo Puenteado los canales operan con polaridades opuestas entre ellos para que un canal ‘empuje’ mientras que el otro ‘jala’ al mismo nivel. La señal es conectada a la conexión de entrada conectando la terminal positiva (+) de la Entrada A a la terminal negativa (-) de la Entrada B y la terminal negativa (-) de la Entrada A a la terminal positiva (+) de la Entrada B. Ambos atenuadores (A y B) son usados para controlar el nivel de la señal, y los dos deben estar al mismo nivel, preferentemente a 0 dB. Las bocinas sólo deben ser conectadas a las terminales de salida designadas “+”. **NUNCA se trate de aterrizar alguno de los canales de los cables de las bocinas cuando el amplificador esté en Modo Puenteado, ya que los dos lados están “calientes”.** Si se usa un panel de parcheo externo para las salidas, todas las conexiones deben estar aisladas entre si y del panel. Para los amplificadores de la serie ICA la impedancia de carga mínima en Modo Puenteado es 8 ohimos, lo equivalente a cargar los dos canales con 4 ohmios cada uno. Las cargas de menos de 8 ohimos pueden activar los circuitos de LFC y también pueden causar condiciones térmicas. **NOTA:** A pesar del modo de operación que se utilice, **NUNCA conecte las salidas del amplificador juntas!**

DIAGRAMA DE MODO ESTÉREO



DIAGRAMA DE MODO PARALELO

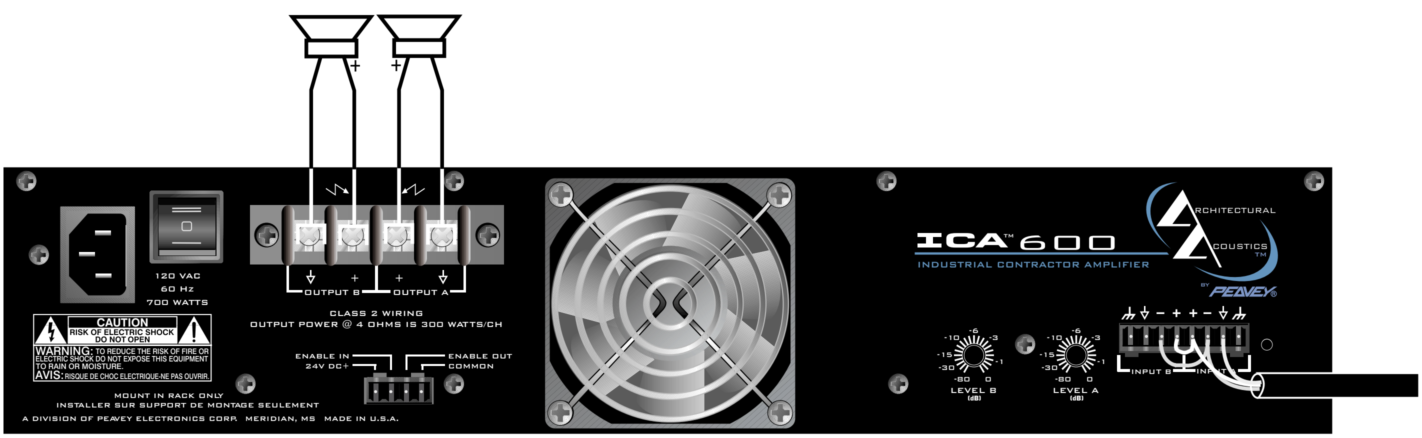


DIAGRAMA DE MODO PUENTEADO



CONEXIONES DE SALIDA DE BOCINAS

Las bocinas son conectadas usando la barra de conexiones de salida. Se puede usar diferentes tipos de cable para hacer estas conexiones. La barra de conexiones proporciona conexiones de hasta dos cables de medida 10 por terminal. *Asegúrese que el amplificador esta apagado (posición off) antes de llevar a cabo cualquier conexión de bocinas.* Consulte la ficha de medidas de cables en la parte trasera de este manual para encontrar una medida que minimice las perdidas de poder en los cables de bocinas. También, asegúrese que la impedancia de la carga no sea inferior a la de la medida del amplificador.

CONEXIÓN DE TIERRA

Las conexiones de entrada permiten que la señal de audio se conecte a la tierra o que esta sea levantada del chasis. Cuando sea posible, la armadura del cable de la fuente de la señal debe conectarse a la tierra del chasis. En algunos casos, particularmente si el amplificador se está conectando en un sistema existente, esto puede hacer un circuito de tierra. Si esto sucede, conecte la armadura a la tierra de la señal solamente. La tierra del chasis también se conecta a la tierra de la CA internamente. Si la armadura del cable es conectada sólo a la tierra de la señal será variada +/- 0.6 V arriba o debajo de la tierra del chasis/ CA.

CARACTERÍSTICAS DE PROTECCIÓN

La serie de amplificadores ICA™ incorpora medidas de seguridad y protección derivadas de años de experiencia en Peavey. Los amplificadores son construidos de forma durable con componentes de alta calidad e incorporan circuitos de seguridad para proteger al amplificador de “eventos de la vida real”.

LIMITE DE CLIP

En el punto de máximo poder, o punto de clip (o saturación), la ganancia automáticamente será reducida, protegiendo a las bocinas contra daños por ondas cuadradas que de otra manera serían producidos. Esto es indicado por la iluminación del LED de CLIP. La operación normal de la unidad no disparará el limite de clip, sólo la saturación excesiva o continua. La operación de esta medida de seguridad es transparente y se mantiene el rango completo de frecuencias.

CORRECCIÓN DE FALLA DE CARGA

LFC (por sus siglas en Inglés) es un circuito innovador que instantáneamente reduce la ganancia de un canal para permitir que el amplificador opere en un nivel seguro bajo una carga anormal. La activación del LFC es indicada por la iluminación del LED de LFC. La activación moderada del LFC no puede ser identificada por el oído bajo condiciones normales. Además, si se encuentra una impedancia demasiado baja o un corto circuito durante condiciones de señal alta, el relay del amplificador se abrirá.

PROTECCIÓN DE FADE-IN
Esta función se activa cada vez que el amplificador es encendido, o después de una condición de protección. Al encenderlo, el amplificador automáticamente se encuentra en modo de protección y mantiene las cargas a las bocinas desconectadas hasta que el amplificador determina que el modo de operación es normal. La protección de Fade-In atenúa la señal durante el proceso inicial de encendido para proteger su operación. Una vez que el relay ha sido soltado, la ganancia de los canales se incrementa gradualmente a su posición para liberar a las bocinas de estrés innecesario.

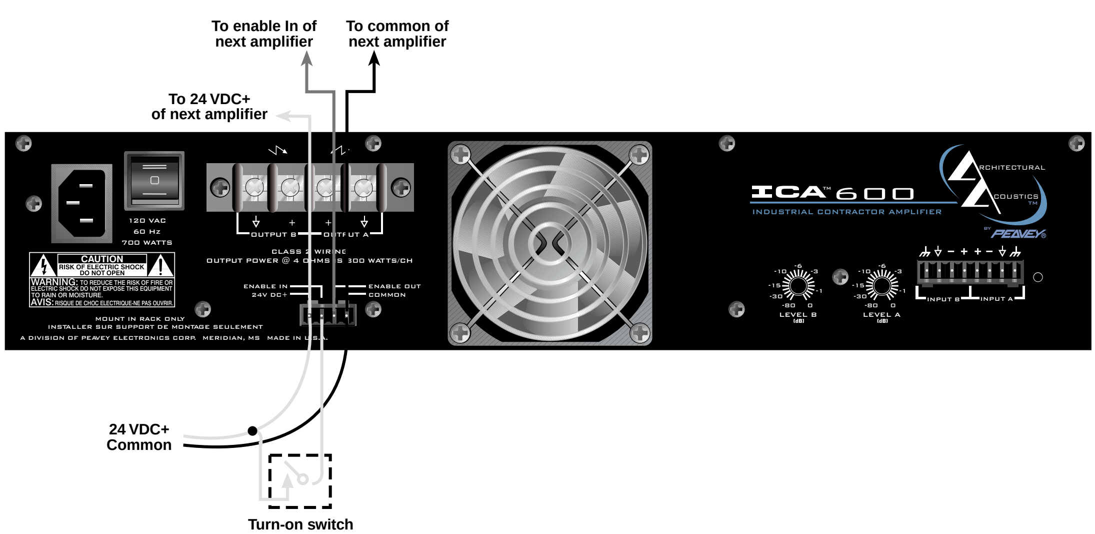
PROTECCIÓN TÉRMICA
Si el amplificador detecta que la temperatura de operación alcanza niveles muy altos, el amplificador se protegerá desconectando la carga de las bocinas hasta que el amplificador regrese a temperaturas de operación aceptables. Durante este tiempo el LED de PROTECCIÓN se iluminará, y el ventilador funcionará a su capacidad máxima.

CORTO CIRCUITO
Si una salida tiene un corto el LFC™, el relay de bocinas y los circuitos térmicos automáticamente protegerán al amplificador. El circuito de LFC siente el corto como una condición de carga anormal y reduce la ganancia del canal a un nivel seguro para la carga e inicia la secuencia de encendido.

PROTECCIÓN DE VOLTAJE DE CD
Si un canal del amplificador detecta voltaje de CD o señales subsonoras en sus terminales de salida, el relay de bocinas inmediatamente se abrirá para prevenir daños a las bocinas. El LED de PROTECCIÓN se iluminará para notificar esta situación.

ENCENDIDO/APAGADO SECUENCIAL
La serie de amplificadores ICA™ viene estándar con operación secuencial remota. El interruptor general del panel frontal debe estar en la posición STANDBY. Una fuente de poder externa que provea voltaje entre 12 y 24 voltios de CD deber ser conectada a la terminal de 4 pins del panel trasero. La conexión de salida ENABLE OUT será conectada a la entrada ENABLE IN del siguiente amplificador. Los amplificadores de la serie ICA™ son entonces conectados entre si de forma paralela y conectados a la fuente de CD conectando todas las terminales 24 V DC + juntas y todas las terminales COMMON juntas. El primer amplificador de la cadena requiere una cerradura SPST entre su terminal 24 V DC + y su terminal ENBLE OUT para iniciar la secuencia y mantener a todos los amplificadores de la cadena encendidos.

Encendido/Apagado Secuencial



FICHA DE MEDIDAS DE CABLES

Longitud De cable (pies)	Medida de cables Aislados (AWG)	Poder Perdido a 8 ohmios	Poder Perdido a 4 ohmios	Poder Perdido a 2 ohmios
5'	18 AWG	.79%	1.58%	3.16%
	16	.5	1.0	2.0
	14	.31	.62	1.24
	12	.20	.40	.80
	10	.125	.25	.50
10'	18 AWG	1.58%	3.16%	6.32%
	16	1.0	2.0	4.00
	14	.62	1.25	2.50
	12	.40	.80	1.6
	10	.25	.50	1.0
40'	18 AWG	8.0%	12.6%	25.2%
	16	4.0	8.0	16.0
	14	2.5	5.0	10.0
	12	1.60	3.2	6.4
	10	1.0	2.0	4.0
	8	.625	1.25	2.50
80'	16 AWG	8.0%	16.0%	32.0%
	14	5.0	10.0	20.0
	12	3.2	6.4	12.8
	10	2.0	4.0	8.0

Especificaciones del ICA™ 600

Poder Medido (2 X 4 ohmios):
300 watts @ 20 Hz - 20 kHz, Los dos canales a < 0.1% THD (Distorsión Total Armónica)

Poder Medido (2 x 8 ohmios):
200 watts @ 20 Hz - 20 kHz a < 0.05% THD

Poder Medido (1 x 4 ohmios):
360 watts @ 1 kHz at < 0.015% THD

Poder Medido (1 x 8 ohmios):
275 watts @ 1 kHz at < 0.005% THD

Impedancia de Carga Mínima:
4 ohmios

Máximo swing de voltaje RMS:
57 voltios

Respuesta de Frecuencias:
10 Hz - 25 kHz; +0, -3 dB a 1 watt

Banda de Poder:
10 Hz - 100 kHz; +0, -3 dB a Poder Medido

THD (Distorsión Total Armónica) (2 x 4 ohmios):
<0.1% @ 300 W de 20 Hz - 20 kHz con los dos canales

THD (2 x 8 ohmios):
<0.05% @ 200 W de 20 Hz - 20 kHz con los dos canales

THD (1 x 4 ohmios):
<0.01% @ 350 W @ 1 kHz

THD (1 x 8 ohmios):
<0.005% @ 275 W @ 1 kHz

SMPTE IMD:
<0.1% 60 Hz y 7 kHz, 300 W @ 4 ohmios

Razón de Slew:
30 V/µs

Factor de Reducción (damping) (8 ohmios):
>450:1 @ 20 Hz - 1 kHz

Entrada CMRR:
>-65 dB @ 1 kHz

Ganancia de Voltaje:
x40 (32 dB)

Sensibilidad de Entrada:
.866 voltios @ 4 ohmios, 1 voltio @ 8 ohmios

Impedancia de Entrada:
20 k ohmios, balanceada

Hum y Ruido:
>-108 dB, Medido de referencia “A” a poder medido @ 8 ohmios

Crosstalk:
>-75 dB, Medido de referencia “A” a poder medido @ 8 ohmios

Necesidad de Corriente @ 1/8 power:
670 watts @ 4 ohmios, 460 watts @ 8 ohmios

Necesidad de Corriente @ 1/3 power:
1,055 watts @ 4 ohmios, 650 watts @ 8 ohmios

Necesidad de Corriente encendido solamente (Idle):
30 watts en modo Standby

Necesidad de Corriente Máxima:
1,622 watts @ 4 ohmios, 1,010 watts @ 8 ohmios

Emisiones Térmicas (BTU/hr.):
625 @ 1/3 de poder 4 ohmios,
500 @ 1/3 de poder 8 ohmios,
395 @ 1/8 de poder 4 ohmios,
350 @ 1/8 de poder 8 ohmios

Enframiento:
Ventilador de CD de 80 mm, apagado hasta 45° C, luego velocidad variable.

Controles:
2 atenuadores en el panel trasero, Encendido / apagado secuecial

Indicadores de LEDs:
2 de Clip, 2 de Señal, 2 de LFC, 1 de protección, 1 de poder (encendido)

Protección:
Temp., DC, arranques iniciales, subsonoro, carga incorrecta o corto

Conectadores:
Entradas de señal de 8-pin,
Poder secuencial de 4-pin,
4-barras de terminales, IEC de CA para corriente

Construcción:
Todo metal; chassis de 16 ga., 18 ga. Arriba,
12 ga. En instaladores de rack

Dimensiones:
3.48" x 19" x 16.4"
88.4 mm x 483 mm x 416.6 mm

Peso:
33.6 lbs. (15.25 kg)

Peso Neto:
30.2 lbs. (13.7 kg)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

Especificaciones del ICA™ 1200

Poder Medido (2 X 4 ohmios):
600 watts @ 20 Hz - 20 kHz, Los dos canales a < 0.1% THD (Distorsión Total Armónica)

Poder Medido (2 x 8 ohmios):
400 watts @ 20 Hz - 20 kHz a < 0.05% THD

Poder Medido (1 x 4 ohmios):
70 watts @ 1 kHz at < 0.015% THD

Poder Medido (1 x 8 ohmios):
425 watts @ 1 kHz at < 0.005% THD

Impedancia de Carga Mínima:
4 ohmios

Máximo swing de voltaje RMS:
70 voltios

Respuesta de Frecuencias:
10 Hz - 25 kHz; +0, -3 dB a 1 Watt

Banda de Poder:
10 Hz - 100 kHz; +0, -3 dB a Poder Medido

THD (Distorsión Total Armónica) (2 x 4 ohmios):
<0.1% @ 600 W de 20 Hz - 20 kHz con los dos canales

THD (2 x 8 ohmios):
<0.05% @ 400 W de 20 Hz - 20 kHz con los dos canales

THD (1 x 4 ohmios):
<0.008% @ 700 W @ 1 kHz

THD (1 x 8 ohmios):
<0.005% @ 425 W @ 1 kHz

SMPTE IMD:
<0.1% 60 Hz y 7 kHz, 300 W @ 4 ohmios

Razón de Slew:
30 V/µs

Factor de Reducción (damping) (8 ohmios):
>350:1 @ 20 Hz - 1 kHz

Entrada CMRR:
>-65 dB @ 1 kHz

Ganancia de Voltaje:
x40 (32 dB)

Sensibilidad de Entrada:
1.22 voltios @ 4 ohmios, 1.41 voltios @ 8 ohmios

Impedancia de Entrada:
20 k ohmios, balanceada

Hum y Ruido:
>-110 dB, Medido de referencia “A” a poder medido

Crosstalk:
>-65 dB, Medido de referencia “A” a poder medido

Necesidad de Corriente @ 1/8 power:
950 watts @ 4 ohmios, 725 watts @ 8 ohmios

Necesidad de Corriente @ 1/3 power:
1,750 watts @ 4 ohmios, 1150 watts @ 8 ohmios

Necesidad de Corriente encendido solamente (Idle):
32 watts en modo Standby

Necesidad de Corriente Máxima:
2670 Watts @ 4 ohmios, 1,725 Watts @ 8 ohmios

Emisiones Térmicas (BTU/hr.):
1,100 @ 1/3 de poder 4 Ohmios,
850 @ 1/3 de poder 8 Ohmios,
635 @ 1/8 de poder 4 Ohmios
540 @ 1/8 de poder 8 Ohmios

Enframiento:
Ventilador de CD de 120 mm, apagado hasta 45° C, luego velocidad variable.

Controles:
2 atenuadores en el panel trasero,
Encendido / apagado secuecial

Indicadores de LEDs:
2 de Clip, 2 de Señal, 2 de LFC, 1 de protección, 1 de poder (encendido)

Protección:
Temp., DC, arranques iniciales, subsonoro,
carga incorrecta o corto

Conectadores:
Entradas de señal de 8-pin,
Poder secuencial de 4-pin,
4-barras de terminales, IEC de CA para corriente

Construcción:
Todo metal; chassis de 16 ga., 18 ga. Arriba, 12 ga. En instaladores de rack

Dimensiones:
5.25" x 19" x 16.4"
133 mm x 483 mm x 416.6 mm

Peso:
51.4 lbs. (23.3 kg)

Peso Neto:
45 lbs. (20.4 kg)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

Especificaciones del ICA™ 2400

Poder Medido (2 X 4 ohmios):
1200 Watts @ 20 Hz - 20 kHz, Los dos canales a < 0.1% THD (Distorsión Total Armónica)

Poder Medido (2 x 8 ohmios):
800 Watts @ 20 Hz - 20 kHz a < 0.08% THD

Poder Medido (1 x 4 ohmios):
1325 Watts @ 1 kHz at < 0.08% THD

Poder Medido (1 x 8 ohmios):
830 Watts @ 1 kHz at < 0.08% THD

Topología:
Clase H

Impedancia de Carga Mínima:
4 ohmios

Máximo swing de voltaje RMS:
95 voltios

Respuesta de Frecuencias:
10 Hz - 25 kHz; +0, -3 dB a 1 Watt

Banda de Poder:
10 Hz - 50 kHz; +0, -3 dB a Poder Medido

THD (Distorsión Total Armónica) (2 x 4 ohmios):
<0.025% @ 1200 W a 1 kHz con los dos canales

THD (2 x 8 ohmios):
<0.008% @ 800 W a 1 kHz con los dos canales

THD (1 x 4 ohmios):
<0.015% @ 1325 W @ 1 kHz

THD (1 x 8 ohmios):
<0.006% @ 830 W @ 1 kHz

SMPTE IMD:
<0.1% 60 Hz y 7 kHz, 800 W @ 8 ohmios

Razón de Slew:
35 V/µs

Factor de Reducción (damping) (8 ohmios):
>250:1 @ 20 Hz - 1 kHz

Entrada CMRR:
>-65 dB @ 1 kHz

Ganancia de Voltaje:
x40 (32 dB)

Sensibilidad de Entrada:
1.73 voltios @ 4 ohmios, 2 voltios @ 8 ohmios

Impedancia de Entrada:
20 k ohmios, balanceada

Hum y Ruido:
>-115 dB, Medido de referencia "A" a poder medido @ 8 ohmios

Crosstalk:
>-55 dB, Medido de referencia "A" a poder medido a 8 ohmios

Necesidad de Corriente @ 1/8 power:
575 watts @ 4 ohmios, 380 watts @ 8 ohmios

Necesidad de Corriente @ 1/3 power:
1,185 watts @ 4 ohmios, 860 watts @ 8 ohmios

Necesidad de Corriente encendido solamente (Idle):
35 VA en modo Standby

Necesidad de Corriente Máxima:
2760 VA Limitado al tiempo del fusible)

Emisiones Térmicas (BTU/hr.):
940 @ 1/8 de poder 4 Ohmios,
615 @ 1/8 de poder 8 Ohmios,
1830 @ 1/3 de poder 4 Ohmios,
1335 @ 1/3 de poder @ 8 Ohmios

Enframiento:
Ventilador de CD de 120 mm, apagado hasta 45° C, luego velocidad variable.

Controles:
2 atenuadores en el panel trasero, Encendido / apagado secuecial

Indicadores de LEDs:
2 de Clip, 2 de Señal, 2 de LFC, 1 de protección, 1 de poder (encendido)

Protección:
Temp., DC, arranques iniciales, subsonoro,
carga incorrecta o corto

Conectadores:
Entradas de señal de 8-pin,
Poder secuencial de 4-pin,
4-barras de terminales, IEC de CA para corriente

Construcción:
Todo metal; chassis de 16 ga., 18 ga. Arriba, 12 ga. En instaladores de rack

Dimensiones:
5.25" x 19" x 16.4"
133 mm x 483 mm x 416.6 mm

Peso:
51.4 lbs. (23.3 kg)

Peso Neto:
45 lbs. (20.4 kg)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

Especificaciones del ICA™ 400V

Poder Medido (dos canales):
200 watts @ 20 Hz - 20 kHz, Los dos canales a < 0.1% THD (Distorsión Total Armónica)

Poder Medido (un canal):
215 watts @ 1 kHz a
< 0.0075% THD

Impedancia de Carga Mínima:
ICA 400V-70: 25 Ohmios
ICA 400V-100: 50 Ohmios

Máximo swing de voltaje RMS:
ICA 400V-70: 86 voltios
ICA 400V-100: 116 voltios

Respuesta de Frecuencias:
10 Hz - 25 kHz; +0, -3 dB a 1 Watt

Banda de Poder:
ICA 400V-70:
10 Hz - 100 kHz; +0, -3 dB a poder medido
ICA 400V-100:
10 Hz - 50 kHz; +0, -.3 dB a poder medido

THD (Distorsión Total Armónica) (dos canales):
ICA 400V-70:
<0.1% @ 200 W de 20 Hz - 20 kHz con los dos canales
ICA 400V-100:
<0.15% @ 200 W de 20 Hz - 20 kHz con los dos canales

THD (un canal):
ICA 400V-70:
<0.005% @ 200 W @ 1 kHz
ICA 400V-100:
<0.015% @ 200 W @ 1 kHz

SMPTE IMD:
<0.1% 60 Hz y 7 kHz, 200 W

Razón de Slew:
ICA 400V-70: 30 V/µs
ICA 400V-100: 40 V/µs

Factor de Reducción (damping):
ICA 400V-70:
>1,000:1 @ 20 Hz - 400 Hz
ICA 400V-100:
>2,000:1 @ 20 Hz - 400 Hz

Entrada CMRR:
>-65 dB @ 1 kHz

Ganancia de Voltaje:
x40 (32 dB)

Sensibilidad de Entrada:
ICA 400V-70:
1.77 voltios a poder medido
ICA 400V-100:
2.5 voltios a poder medido

Impedancia de Entrada:
20 k Ohmios, balanceada

Hum y Ruido:
>-110 dB, Medido de referencia “A” a poder medido

Crosstalk:
ICA 400V-70
>-70 dB, Medido de referencia “A” a poder medido
ICA 400V-100:
>-65 dB, Medido de referencia “A” a poder medido

Necesidad de Corriente @ 1/8 power:
ICA 400V-70: 415 watts
ICA 400V-100: 385 watts

Necesidad de Corriente @ 1/3 power:
ICA 400V-70: 600 watts
ICA 400V-100: 565 watts

Necesidad de Corriente encendido solamente (Idle):
ICA 400V-70:
38 watts en modo Standby
ICA 400V-100:
43 watts en modo Standby

Necesidad de Corriente Máxima:
ICA 400V-70:
970 watts a poder medido
ICA 400V-100:
840 watts a poder medido

Emisiones Térmicas (BTU/hr.):
500 @ 1/3 de poder,
350 @ 1/8 de poder

Enframiento:
Ventilador de CD de 80 mm, apagado hasta 45° C, luego velocidad variable.

Controles:
2 atenuadores en el panel trasero,
Encendido / apagado secuecial

Indicadores de LEDs:
2 de Clip, 2 de Señal, 2 de LFC, 1 de protección,
1 de poder (encendido)

Protección:
Temp., DC, arranques iniciales, sub-sonoro, carga incorrecta o corto

Conectadores:
Entradas de señal de 8-pin,
Poder secuencial de 4-pin,
4-barras de terminales, IEC de CA para corriente

Construcción:
Todo metal; chassis de 16 ga., 18 ga. Arriba, 12 ga. En instaladores de rack

Dimensiones:
3.48" x 19" x 16.4"
88.4 mm x 483 mm x 416.6 mm

Peso:
33.5 lbs. (15.2 kg.)

Peso Neto:
31 lbs. (14 kg.)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

Especificaciones del ICA™ 800V

Poder Medido (dos canales):
400 Watts @ 20 Hz - 20 kHz, Los dos canales a < 0.1% THD (Distorsión Total Armónica)

Poder Medido (un canal):
415 Watts @ 1 kHz a
< 0.01% THD

Impedancia de Carga Mínima:
ICA 800V-70: 12.5 ohmios
ICA 800V-100: 25 ohmios

Máximo swing de voltaje RMS:
ICA 800V-70: 85 voltios
ICA 800V-100: 110 voltios

Respuesta de Frecuencias:
10 Hz - 25 kHz; +0, -3 dB a 1 Watt

Banda de Poder:
ICA 800V-70:
10 Hz - 100 kHz; +0, -3 dB a poder medido
ICA 800V-100:
10 Hz - 50 kHz; +0, -3 dB a poder medido

THD (Distorsión Total Armónica) (dos canales):
ICA 800V-70:
<0.15% @ 400 W from 20 Hz - 20 kHz con los dos canales
ICA 800V-100:
<0.1% @ 400 W from 20 Hz - 20 kHz con los dos canales

THD (un canal):
<0.008% @ 400 W @ 1 kHz

SMPTE IMD:
<0.1% 60 Hz y 7 kHz, 200 W

Razón de Slew:
35 V/µs

Factor de Reducción (damping):
>400:1 @ 20 Hz - 400 Hz

Entrada CMRR:
>-65 dB @ 1 kHz

Ganancia de Voltaje:
x40 (32 dB)

Sensibilidad de Entrada:
ICA 800V-70:
1.77 voltios a poder medido
ICA 800V-100:
2.5 voltios a poder medido

Impedancia de Entrada:
20 k ohmios, balanceada

Hum y Ruido:
>-108 dB, Medido de referencia "A" a poder medido

Crosstalk:
>-65 dB, Medido de referencia "A" a poder medido

Necesidad de Corriente @ 1/8 power:
ICA 800V-70: 765 watts
ICA 800V-100: 775 watts

Necesidad de Corriente @ 1/3 power:
ICA 800V-70: 1,100 watts
ICA 800V-100: 1,150 watts

Necesidad de Corriente encendido solamente (Idle):
45 watts en modo Standby

Necesidad de Corriente Máxima:
ICA 800V-70:
1,680 watts a poder medido
ICA 800V-100:
1,700 watts a poder medido

Emisiones Térmicas (BTU/hr.):
550 @ 1/8 de poder,
835 @ 1/3 de poder

Enframiento:
Ventilador de CD de 120 mm, apagado hasta
45° C, luego velocidad variable.

Controles:
2 atenuadores en el panel trasero,
Encendido / apagado secuecial

Indicadores de LEDs:
2 de Clip, 2 de Señal, 2 de LFC, 1 de protección,
1 de poder (encendido)

Protección:
Temp., DC, arranques iniciales, subsonoro, carga incorrecta o corto

Conectadores:
Entradas de señal de 8-pin,
Poder secuencial de 4-pin,
4-barras de terminales, IEC de CA para corriente

Construcción:
Todo metal; chassis de 16 ga., 18 ga. Arriba, 12 ga. En instaladores de rack

Dimensiones:
5.25" x 19" x 16.4"
133 mm x 483 mm x 416.6 mm

Peso:
51.4 lbs. (23.3 kg.)

Peso Neto:
45 lbs. (20.4 kg.)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

Especificaciones del ICA™ 2400V

Poder Medido (dos canales):
1200 watts @ 20 Hz - 20 kHz, Los dos canales a < 0.1% THD (Distorsión Total Armónica)

Poder Medido (un canal):
Esperando Resultados

Topología:
Clase H

Impedancia de Carga Mínima:
@ 70.7 volts 6.3 Ohms

Máximo swing de voltaje RMS:
95 voltios

Respuesta de Frecuencias:
10 Hz - 25 kHz; +0, -3 dB a 1 Watt

Banda de Poder:
10 Hz - 50 kHz; +0, -3 dB a poder medido

THD (Distorsión Total Armónica) (dos canales):
<0.008% @ 800 W @ 1 kHz con los dos canales

THD (un canal):
<0.006% @ 830 W @ 1 kHz

SMPTE IMD:
<0.1% 60 Hz y 7 kHz, 200 W

Razón de Slew:
35 V/µs

Factor de Reducción (damping):
>250:1 @ 20 Hz – 1 kHz

Entrada CMRR:
>-65 dB @ 1 kHz

Ganancia de Voltaje:
x40 (32 dB)

Sensibilidad de Entrada:
1.77 voltios

Impedancia de Entrada:
20 k ohmios, balanceada

Hum y Ruido:
>-115 dB, Medido de referencia “A” a poder medido

Crosstalk:
>-55 dB, Medido de referencia “A” a poder medido

Necesidad de Corriente @ 1/8 power:
497 watts

Necesidad de Corriente @ 1/3 power:
1037 watts

Necesidad de Corriente encendido solamente (Idle):
35 VA en modo Standby

Necesidad de Corriente Máxima:
2,760 VA (con limite de tiempo de fusible)

Emisiones Térmicas (BTU/hr.):
940 @ 1/8 power,
1,830 @ 1/3 power

Enframiento:
Ventilador de CD de 120 mm, apagado hasta 45° C, luego velocidad variable.

Controles:
2 atenuadores en el panel trasero,
Encendido / apagado secuecial

Indicadores de LEDs:
2 de Clip, 2 de Señal, 2 de LFC, 1 de protección,
1 de poder (encendido)

Protección:
Temp., DC, arranques iniciales, subsonoro, carga incorrecta o corto

Conectadores:
Entradas de señal de 8-pin,
Poder secuencial de 4-pin,
4-barras de terminales, IEC de CA para corriente

Construcción:
Todo metal; chassis de 16 ga., 18 ga. Arriba, 12 ga. En instaladores de rack

Dimensiones:
5.25" x 19" x 16.4"
133 mm x 483 mm x 416.6 mm
Peso:
51.4 lbs. (23.3 kg.)

Peso Neto:
45 lbs. (20.4 kg.)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

FRANÇAIS

INTRODUCTION

Félicitations d'avoir choisi un Architectural Acoustics ICA™ (Industrial Contractor Amplifier) de Peavey Electronics. Veuillez lire attentivement ce manuel, surtout les CONSIGNES DE SECURITE à la page 18, qui contiennent des informations essentielles pour le bon fonctionnement de votre amplificateur. De plus, veuillez remplir et nous retourner la Regitration Card fournie avec votre matériel.

Les amplificateurs de la série ICA instaurent de nouveaux standarts en terme de qualité et de flexibilité, jamais atteints à ce jour. Les diffférents modèles de la gamme ICA sont prévus pour délivrer un signal sous 4ohms, en 70,7Volts ou en 100Volts. Ceci permet d'éviter l'addition de transformateurs pour une utilisation en ligne 70,7Volts ou 100Volts et fait que ces amplificateurs conviendront à de très nombreuses utilisations.

Les amplificateurs de la série ICA sont assemblés à partir de composants de très haute qualité, et possèdent un système de sécurité qui protège votre matériel contre d'éventuels problèmes d'utilisation.

Si vous avez besoin d'assistance pour l'installation ou l'utilisation de ce matériel, n'hésitez pas à contacter le service après-vente Peavey Electronics ou votre revendeur agréé. Nous apprécions toutes remarques ou suggestions nous permettant d'améliorer nos produits ou services.

DEBALLAGE

Inspectez votre unité durant son déballage. Si vous constatez le moindre problème, notifiez-le immédiatement auprès de votre revendeur. Assurez-vous de garder les emballages d'origine, si jamais vous deviez renvoyer votre unité chez Peavey Electronics, l'un de ses centres techniques ou votre revendeur.

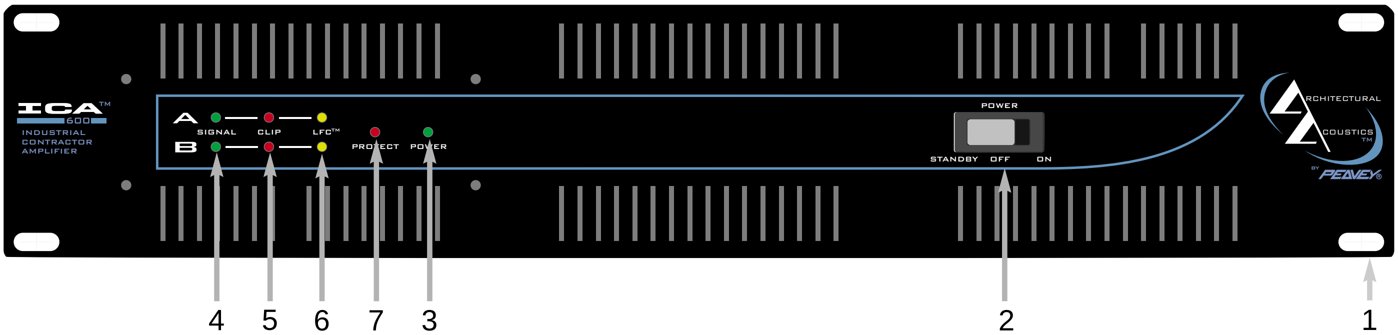
INSTALLATION

Les amplificateurs de la série ICA sont de type 2 ou 3-unités-rack, d'une profondeur de 15 3/4" (400 mm) pouvant être installés dans un support standard 19" rack. Sur tous les modèles, vous trouverez les fixations sur la face avant.

MISE EN ROUTE

1. Installez votre amplificateur dans son emplacement d'utilisation. Assurez-vous qu'il soit accessible (panneau arrière et avant) et que l'emplacement choisi permette une bonne circulation d'air pour le système de refroidissement. Pour plus d'informations, reportez-vous aux paragraphes INSTALLATION et SYSTEME DE REFROIDISSEMENT.
2. Connectez les entrées au bloc de connexions (Input) situé sur le panneau arrière. Utilisez en fonction de vos besoins les entrées appropriées (Stéréo, Parallèle et Bridge). Pour plus d'informations, reportez-vous aux paragraphes SIGNAL D'ENTREE et CONNEXIONS ENTREES.
3. Connectez les enceintes au bloc de connexions (Output) situé sur le panneau arrière. Utilisez en fonction de vos besoins les entrées appropriées (Stéréo, Parallèle et Bridge).Pour plus d'informations, reportez-vous aux paragraphes CONNEXIONS SORTIES.
4. Connectez votre unité à une alimentation électrique adéquate. Pour plus d'informations, reportez-vous aux paragraphes CONNECTEUR D'ALIMENTATION IEC.
5. Mettre l'interrupteur 3-positions situé sur le panneau avant sur ON et tourner les contrôles de gain situés sur le panneau arrière jusqu'au niveau désiré.

PANNEAU AVANT



1. **PATTES DE FIXATION RACK**
   Chaque unité possède un panneau avant au format Rack.

2. **INTERRUPTEUR 3-POSITIONS D'ALIMENTATION**
   La "Mise en Route-Arrêt séquentiel contrôlable à distance" est disponible sur tous les modèles. Le sélecteur est sur ON en position extérieure (droite), sur OFF dans la position intermédiaire et sur STANDBY en position intérieure (gauche). Dans cette dernière position, la mise en route et l'arrêt de votre unité peuvent être controlés à distance. Référez-vous au paragraphe MISE EN ROUTE / ARRET SEQUENTIELS pour plus d'informations.

3. **LED D'ALIMENTATION**
   Cette Led s'illumine quand l'unité est sous tension.

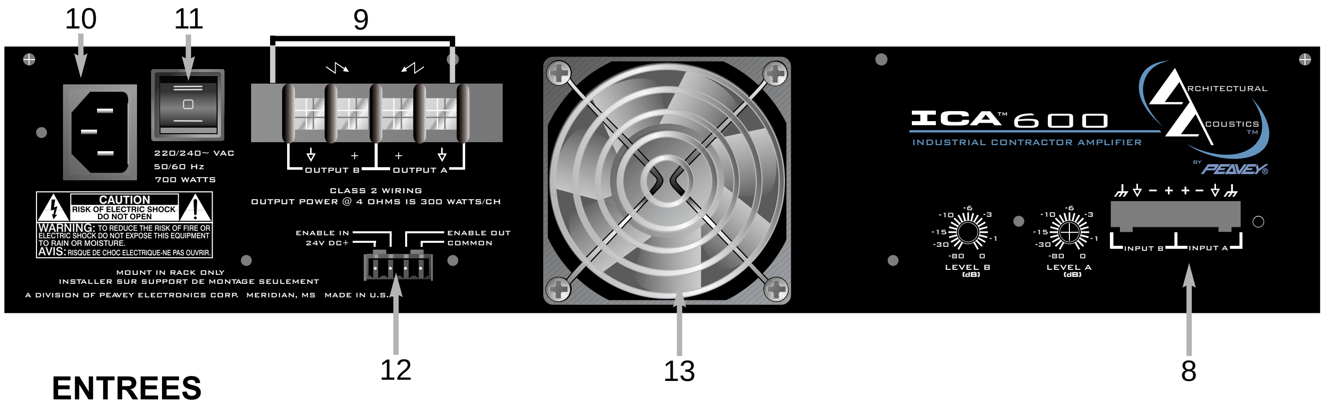
4. **LED DE SIGNAL**
   Chaque canal possède une Led s'illuminant lorsque son signal d'entrée dépasse 1 volt.

5. **LED DE PROTECTION - CLIP**
   Chaque canal possède une Led s'illuminant lorsque lorsque son circuit de protection se met en marche. Référez-vous au paragraphe SYSTEMES DE PROTECTION pour plus d'information.

6. **LED LFC™**
   Chaque canal possède une Led d'indication Load Fault Correction. Cette Led s'illumine lorsque le canal détecte une charge de sortie non conforme. Un circuit de protection réduira automatiquement le gain permettant à l'amplificateur de travailler sans risque avec cette charge. Référez-vous au paragraphe SYSTEMES DE PROTECTION pour plus d'information.

7. **LED DE PROTECTION**
   Si l'unité vient d'être mise sous tension ou a détecté un problème, cette Led s'illuminera.

PANNEAU ARRIERE



8. ENTREES

Les Amplificateurs ICA™ sont équipés d'un bloc d'entrée permettant d'y insérer une prise 4-connecteurs Phenix par canal. Il vous est possible de relier la masse du signal audio à celle de votre unité grâce à ces connections.

9. SORTIES

Ce bloc est prévu pour recevoir les connexions des enceintes. Il est prévu pour du fil dénudé ou équipé d'une cosse à fourche. Il est prévu pour connecter jusqu'à 2 câbles dénudés de $6mm^2$ par terminal.

10. CONNECTEUR D'ALIMENTATION IEC

Un connecteur d'alimentation IEC est situé sur le panneau arrière de votre unité. Un câble IEC est nécessaire pour la connection à la source d'alimentation (fourni).

11. DISJONCTEUR

Il est situé dans le coin supérieur gauche du panneau arrière. Si celui-ci est désengagé (position sortie), enfoncez-le pour remettre l'unité en condition de fonctionnement. Si le disjoncteur continue à se désengager, votre unité a besoin d'être vérifiée par un technicien. N'insistez pas sur le disjoncteur car vous risquez d'endommager sérieusement votre ampli.

12. CONNECTEUR DE CONTROLE A DISTANCES

Les amplificateurs de la série ICA™ possèdent un mode de fonctionnement contrôlable à distance, activé quand le sélecteur d'alimentation est en position STANDBY. L'unité se mettra en fonction à la réception d'un signal de 12 à 24 Volts entre les pins ENABLE et COMMON(masse). Si aucun signal n'est recu (ou le circuit ouvert), l'ampli se mettra en mode passif (pas d'amplification). Vous pouvez chainer plusieurs amplis ICA en connectant toutes les pins +24V ensembles, les pins COMMON ensembles et la pin ENABLE OUT à celle ENABLE IN de l'unité suivante. Un connecteur inter-unité est fourni.

13. GRILLE DE VENTILATEUR

Un ventilateur à vitesse variable assure la ventilation de votre unité. **Ne couvrez pas cette entrée.** Le ventilateur ne fonctionne que lorsque les radiateurs de votre unité le nécessite.

OPERATION

ALIMENTATION ELECTRIQUE

La consommation électrique des unités ICA™ est noté: "idle"(en veille), 1/8 puissance maximale (condition typique musicale), 1/3 puissance maximale, et puissance maximale. Cette dernière est limitée par la présence d'un disjoncteur. Consultez la feuille de spécificité pour connaître les besoins de votre unité. Le voltage doit être le même que celui annoté à l'arrière de votre unité. Les dommages causés par une alimentation inadaptée ne sont pas couverts par la garantie. *NOTE: Toujours mettre hors tension et débrancher de l'alimentation avant de procéder à des connexions audio. Par mesure de sécurité, toujours positionner les contrôles de gain situés sur le panneau arriére au minimum lors de la mise sous tension initiale.*

REFROIDISSEMENT

Les unités de la série ICA utilisent un système d'air forcé pour maintenir une température de fonctionnement. La circulation d'air est assurée par un ventilateur à vitesse variable monté sur le panneau arrière et des grilles d'échappement sur le panneau avant. Le ventilateur ne se met en fonctionnement qu'à partir d'une température interne de 45º C. Assurez-vous qu'il y ait suffisamment d'espace autour de votre unité pour ce circuit d'air. *NOTE: Si vous installez votre unité dans un support Rack, n'utilisez pas les portes avant et arrière sans prévoir un système de surpression sur l'arrière, en prévision des besoins en air frais lors du fonctionnement. L'air doit pouvoir circuler sans contrainte vers l'entrée (panneau arrière) et depuis la sortie (panneau avant).*

HIBERNATION™

Toutes les unités de la série ICA sont équippés d'un circuit Hibernation. La consommation électrique et le dégagement calorifique sont reduits au minimum si aucun signal n'est recu en entrée pour plus d'une minute. Dès qu'un signal est recu, Hibernation restaure le mode de fonctionnement de l'amplificateur. Les besoins électriques lorsque Hibernation est actif correspondent à ceux notés "Idle"(en veille).

EMISSIONS THERMIQUES

Le concepteur de votre installation devrait préciser les besoins exacts de votre système.Référez-vous aux spécifications notées à la fin de ce manuel pour plus d'informations.

CONNECTEURS D'ENTREE

Le connecteur d'entrée accepte aussi bien les signaux audio symétriques et assymétriques. Dans le cas d'une source assymétrique, connectez la pin (-) du bloc de connexions à la masse de ce bloc. Si la pin (-) est laissée non-connectée, il en résultera une perte de gain de 6 dB.

CONFIGURATION DU SIGNAL D'ENTREE

Les unités ICA™ peuvent fonctionner en stéréo (2 canaux), en pont (Bridge) ou en parallèle (même signal sur les 2 canaux).

Pour envoyer le même signal aux 2 canaux (Mode Parallèle), connectez normalement le canal A, et connectez ensemble les bornes positives des 2 entrées puis les bornes négatives des 2 entrées. Chaque canal recoit le même signal mais agit indépendamment (La connexion des enceintes est semblable à un mode Stéréo).

Le Mode Pont (Bridge) convertit votre unité en un amplificateur mono-canal dont la puissance est égale à la somme des puissances de chaque canal d'origine et la charge minimale est la somme

des charges minimales de chaque canal. Chaque canal agit en inversion par rapport à l'autre, en connectant la pin (-) du canal A à la pin (+) du canal B et la pin (+) du canal A à la pin (-) du canal B. Le signal d'entrée est connecté normalement aux pin (+) et (-) du canal A. Les 2 contrôles de gain agiront sur la puissance du signal, et doivent être à la même valeur (de préférence 0dB). Les hauts-parleurs sont connectés aux bornes (+) de chaque canal. **Ne jamais connecter un côté des hauts-parleurs à la masse en mode Pont car les 2 côtés sont dits "chauds".** Si un panneau de cablâge de sortie (Patch Panel) est utilisé, toutes les connexions doivent être isolées indépendamment et par rapport au panneau. Les unités de la série ICA permettent une charge minimum de 8 ohms en Mode Pont, ce qui équivaut à 4 ohms par coté en Mode Stéréo. Une charge inférieure activerait le circuit de protection de charge ainsi que celui de protection thermique.

STEREO MODE CONNECTION DIAGRAM



PARALLEL MODE DIAGRAM



BRIDGED MODE DIAGRAM



CONNEXIONS HAUTS-PARLEUR

Les hauts-parleurs sont à connecter au bloc de sortie (Output). Vous pouvez y connecter des cosses à fourches ou des fils dénudés, avec un maximum de 2 câbles de 6mm^2 par teminal. *Assurez-vous que votre unité est déconnectée de l'alimentation avant de toucher les connecteurs de sortie.* Consultez la charte de câblage à la fin de ce manuel pour minimiser les pertes. Assurez-vous également que la charge totale ne soit pas inférieure à celle recommandée pour votre unité

MASSE DU SIGNAL

Le bloc de connexions d'entrée (INPUT) permet d'unifier les masses de votre unité et du signal audio. Si possible, les différentes masses doivent être connectées ensemble. Néanmoins, surtout si l'unité est ajoutée à un système existant, cela peut créer une "boucle de masse" engendrant un bruit parasite. Si ce phénomène se présente, ne connectez la masse du câble qu'à la masse de l'entrée audio. Cette dernière est également connectée à la masse de l'alimentation de facon interne, et allouera une différence de potentiel de +/- 0.6 V par rapport à celle de l'alimentation.

SYSTEMES DE PROTECTION

Les unités de la série ICA™ incorporent plusieurs systèmes de sécurité résultants de l'expérience de Peavey dans l'amplification audio. Ils sont assemblés avec des composants de haute qualité et disposent de protections permettant d'éviter les principaux problèmes et dommages à votre système.

CLIP LIMITEUR

A pleine puissance (clipping point), le gain du canal concerné sera automatiquement reduit, évitant d'endommager les hauts-parleurs par l'excès de puissance ou des ondes "créneaux" qui risqueraient d'être produits. Cette réduction du gain est effective lorsque la Led (Clip Led) s'illumine. Un signal normal peut déclencher la Led de Clip de temps en temps sans être notifiable au niveau sonore, seul un niveau excessif et prolongé (Led allumée sans discontinuité) déclenchera une baisse de gain "audible". Ce système est dit "transparent" car la bande complète de signal est maintenue.

CORRECTION DE CHARGE™

LFC (Load Fault Correction) est un circuit qui réduira instantanément le gain du signal pour permettre à l'unité d'éviter les problèmes liés à une charge trop faible en sortie. La Led LFC s'illumine quand ce circuit est actif. Un déclenchement occasionnel de ce circuit est inaudible. Dans le cas d'un court circuit ou d'une charge excessivement faible sur les sorties de l'unité, le relai de sortie s'ouvrira.

PROTECTION DE MISE EN ROUTE
A chaque fois que l'unité est mise sous tension, ou après une restauration d'état de protection, celle-ci passera en mode protégé et laisse les hauts-parleurs déconnectés jusqu'à vérification des systèmes de protection. Une fois la vérification terminée, l'unité fermera le relai du signal, mais en atténuant le gain, et augmentera celui-ci progressivement jusqu'au niveau normal pour éviter tout dommage aux hauts-parleurs.

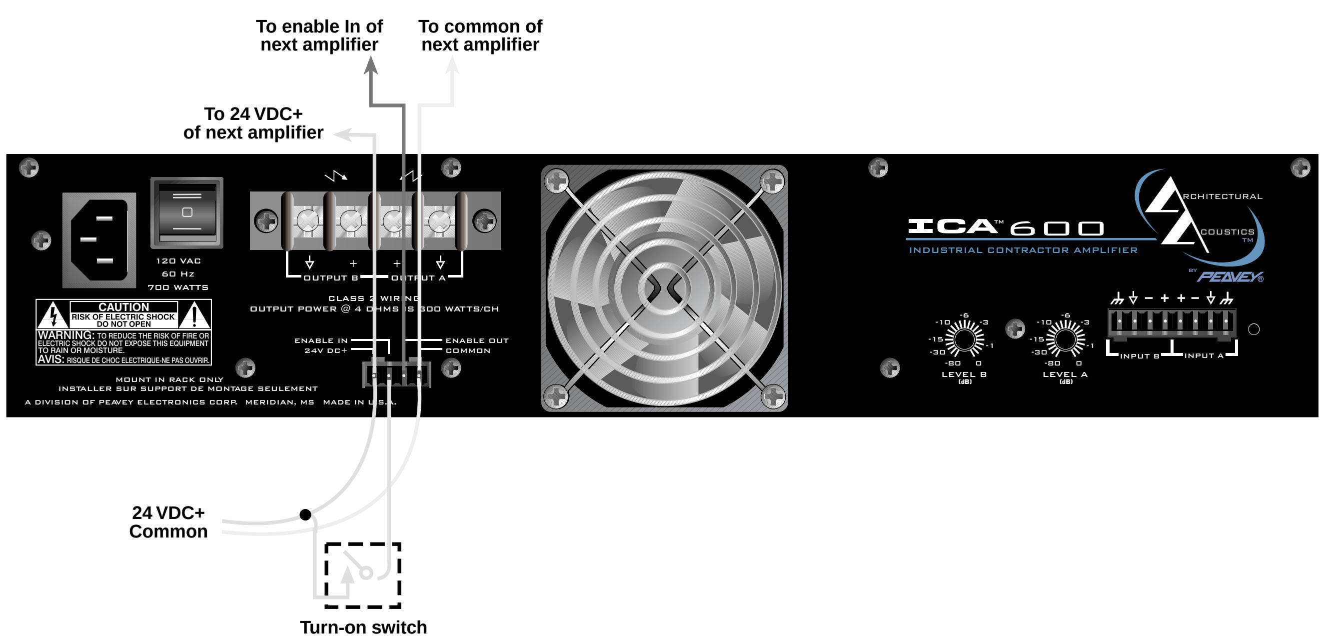
PROTECTION THERMALE
Si le transformateur ou les radiateurs atteignent une température anormale, l'unité s'auto-protègera en déconnectant la charge de sortie jusqu'à regagner la température de fonctionnement. Pendant cette coupure, la PROTECT LED s'illuminera et le ventilateur fonctionnera à sa vitesse maximale.

PROTECTION DE COURT CIRCUIT
Si une sortie est en court-circuit, le LFC™(Correction de Charge), le relai de sortie et la protection thermique s'activeront pour protéger l'unité. Le LFC verra une charge trop faible et réduira le gain du signal. Dans des conditions extrêmes, le relai de sortie s'ouvrira (déconnexion de la sortie) et entamera une procédure de redémarrage.

PROTECTION DE COURANT CONTINU
Si l'unité détecte un courant continu ou un signal sub-sonique en sortie, le relai de sortie s'ouvrira instantanément pour éviter tout dommage aux enceintes. La PROTECT LED s'illuminera pour vous notifier la situation.

MISE EN ROUTE/ARRET SEQUENTIELS
Les unités de la série ICA™ sont équippées d'un système de contrôle de mise sous/hors tension à distance, actif lorsque l'interrupteur d'alimentation est sur STANBDBY. Une alimentation externe générant de 12 à 24 volts DC doit être appliquée au connecteur situé sur le panneau arrière. Le ENABLE OUT doit être connecté au ENABLE IN de l'unité suivante. Les différentes unités sont "couplées" en reliant en parallèle tous les terminaux 24 V DC+ ensemble et COMMON ensemble pour la séquence de mise en route.

MISE EN ROUTE/ARRET SEQUENTIELS



WIRE GAUGE CHART

Cable Length (Feet)	Stranded Wire Gauge (mm^2)	Power Loss Into 8 ohms	Power Loss Into 4 ohms	Power Loss Into 2 o
5'	1	.79%	1.58%	3.16%
	1,5	.5	1.0	2.0
	2,5	.31	.62	1.24
	4	.20	.40	.80
	6	.125	.25	.50
10'	1	1.58%	3.16%	6.32%
	1,5	1.0	2.0	4.00
	2,5	.62	1.25	2.50
	4	.40	.80	1.6
	6	.25	.50	1.0
40'	1	8.0%	12.6%	25.2%
	1,5	4.0	8.0	16.0
	2,5	2.5	5.0	10.0
	4	1.60	3.2	6.4
	6	1.0	2.0	4.0
	10	.625	1.25	2.50
80'	1,5	8.0%	16.0%	32.0%
	2,5	5.0	10.0	20.0
	4	3.2	6.4	12.8
	6	2.0	4.0	8.0

ICA™ 600 SPECIFICATIONS

Rated Power (2 X 4 ohms):
300 watts @ 20 Hz - 20 kHz, both channels driven at < 0.1% THD

Rated Power (2 x 8 ohms):
200 watts @ 20 Hz - 20 kHz at < 0.05% THD

Rated Power (1 x 4 ohms):
360 watts @ 1 kHz at < 0.015% THD

Rated Power (1 x 8 ohms):
275 watts @ 1 kHz at < 0.005% THD

Minimum Load Impedance:
4 ohms

Maximum RMS Voltage Swing:
57 volts

Frequency Response:
10 Hz - 25 kHz; +0, -3 dB at 1 watt

Power Bandwidth:
10 Hz - 100 kHz; +0, -3 dB at rated power

THD (2 x 4 ohms):
<0.1% @ 300 W from 20 Hz - 20 kHz with both channels driven

THD (2 x 8 ohms):
<0.05% @ 200 W from 20 Hz - 20 kHz with both channels driven

THD (1 x 4 ohms):
<0.01% @ 350 W @ 1 kHz

THD (1 x 8 ohms):
<0.005% @ 275 W @ 1 kHz

SMPTE IMD:
<0.1% 60 Hz and 7 kHz, 300 W @ 4 ohms

Slew Rate:
30 V/µs

Damping Factor (8 ohms):
>450:1 @ 20 Hz - 1 kHz

Input CMRR:
>-65 dB @ 1 kHz

Voltage Gain:
x40 (32 dB)

Input Sensitivity:
.866 volts @ 4 ohms, 1 volt @ 8 ohms

Input Impedance:
20 k ohms, balanced

Hum and Noise:
>-108 dB, "A" weighted referenced to rated power @ 8 ohms

Crosstalk:
>-75 dB, "A" weighted referenced to rated power @ 8 ohms

Current Draw @ 1/8 power:
670 watts @ 4 ohms, 460 watts @ 8 ohms

Current Draw @ 1/3 power:
1,055 watts @ 4 ohms, 650 watts @ 8 ohms

Idle Current Draw:
30 watts in Standby Mode

Maximum Current Draw:
1,622 watts @ 4 ohms, 1,010 watts @ 8 ohms

Thermal Emissions (BTU/hr.):
625 @ 1/3 power 4 ohms,
500 @ 1/3 power 8 ohms,
395 @ 1/8 power 4 ohms,
350 @ 1/8 power 8 ohms

Cooling:
80 mm DC fan, off until heatsinks reach 45° C, then variable speed

Controls:
2 rear panel attenuators, sequential turn-on / off

Indicator LEDs:
2 Clip, 2 Signal, 2 LFC, 1 Protect, 1 Power

Protection:
Temp., DC, turn-on bursts, subsonic, incorrect load or short

Connectors:
8-pin plugable signal input, 4-pin plugable sequential power, 4-terminal barrier strip, IEC AC power connector

Construction:
All steel; 16 ga. chassis, 18 ga. top, 12 ga. rack ears

Dimensions:
3.48" x 19" x 16.4"
88.4 mm x 483 mm x 416.6 mm

Gross Weight:
33.6 lbs. (15.25 kg)

Net Weight:
30.2 lbs. (13.7 kg)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

ICA™ 1200 SPECIFICATIONS

Rated Power (2 X 4 ohms):
600 watts @ 20 Hz - 20 kHz, both channels driven at < 0.1% THD

Rated Power (2 X 8 ohms):
400 watts @ 20 Hz - 20 kHz, both channels driven at < 0.05% THD

Rated Power (1 X 4 ohms):
70 watts @ 1 kHz at < 0.008% THD

Rated Power (1 X 8 ohms):
425 watts @ 1 kHz at < 0.005% THD

Minimum Load Impedance:
4 ohms

Maximum RMS Voltage Swing:
70 volts

Frequency Response:
10 Hz - 25 kHz; +0, -.3 dB at 1 watt

Power Bandwidth:
10 Hz - 100 kHz; +0, -3 dB at rated power

THD (2 x 4 ohms):
<0.1% @ 600 W from 20 Hz - 20 kHz with both channels driven

THD (2 x 8 ohms):
<0.05% @ 400 W from 20 Hz - 20 kHz with both channels driven

THD (1 X 4 ohms):
<0.008% @ 700 W @ 1 kHz

THD (1 X 8 ohms):
<0.005% @ 425 W @ 1 kHz

SMPTE IMD:
<0.1% 60 Hz and 7 kHz, 600 W @ 4 ohms

Slew Rate:
30 V/µs

Damping Factor (8 ohms):
>350:1 @ 20 Hz - 1 kHz

Input CMRR:
>-65 dB @ 1 kHz

Voltage Gain:
x40 (32 dB)

Input Sensitivity:
1.22 volts @ 4 ohms, 1.41 volts @ 8 ohms

Input Impedance:
20 k ohms, balanced

Hum and Noise:
>-110 dB, "A" weighted referenced to rated power

Crosstalk:
>-65 dB, "A" weighted referenced to rated power

Current Draw @ 1/8 power:
950 watts @ 4 ohms, 725 watts @ 8 ohms

Current Draw @ 1/3 power:
1,750 watts @ 4 ohms, 1,150 watts @ 8 ohms

Idle Current Draw:
32 watts in Standby Mode

Maximum Current Draw:
2,670 watts @ 4 ohms (time limited by breaker), 1,725 watts @ 8 ohms

Thermal Emissions (BTU/hr.):
1,100 @ 1/3 power 4 ohms,
850 @ 1/3 power 8 ohms,
635 @ 1/8 power 4 ohms,
540 @ 1/8 power 8 ohms

Cooling
120 mm DC fan, off until heatsinks reach 45° C, then variable speed

Controls:
2 rear panel attenuators, sequential turn-on / off

Indicator LEDs:
2 Clip, 2 Signal, 2 LFC, 1 Protect, 1 Power

Protection:
Temp., DC, turn-on bursts, subsonic, incorrect load or short

Connectors:
8-pin plugable signal input, 4-pin plugable sequential power, 4-terminal barrier strip, IEC AC power connector

Construction:
All steel; 16 ga. chassis, 18 ga. top, 12 ga. rack ears

Dimensions:
5.25" x 19" x 16.4"
133 mm x 483 mm x 416.6 mm

Gross Weight:
51.4 lbs. (23.3 kg)

Net Weight:
45 lbs. (20.4 kg)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

ICA™ 2400 SPECIFICATIONS

Rated Power (2 x 4 ohms):
1200 watts @ 20 Hz - 20 kHz both channels driven at < 0.1% THD

Rated Power (2 x 8 ohms):
800 watts @ 20 Hz – 20 kHz both channels driven at < 0.08% THD

Rated Power (1 x 4 ohms):
1325 watts @ 1 kHz at < 0.08% THD

Rated Power (1 x 8 ohms):
830 watts @ 1 kHz at < 0.08% THD

Topology:
Class H

Minimum Load Impedance:
4 ohms

Maximum RMS Voltage Swing:
95 volts

Frequency Response:
10 Hz – 25 kHz; +0, -.3 dB at 1 watt

Power Bandwidth:
10 Hz – 50 kHz; +0, -3 dB at rated power

THD (2 x 4 ohms):
<0.025% @ 1200 W @ 1 kHz with both channels driven

THD (2 x 8 ohms):
<0.008% @ 800 W @ 1 kHz with both channels driven

THD (1 x 4 ohms):
<0.015% @ 1325 W @ 1kHz

THD (1 x 8 ohms):
<0.006% @ 830 W @ 1kHz

SMPTE IMD:
<0.1% 60 Hz and 7 kHz, 800 W @ 8 ohms

Slew Rate:
35 V/us

Damping Factor (8 ohms):
>250:1 @ 20 Hz – 1 kHz

Input CMRR:
> 65 dB @ 1 kHz

Voltage Gain:
x 40 (32 dB)

Input Sensitivity:
1.73 volts @ 4 ohms, 2 volts @ 8 ohms

Input Impedance:
20 k ohms, balanced

Hum and Noise:
>-115 dB, “A” weighted referenced to rated power @ 8 ohms

Crosstalk:
>-55 dB, “A” weighted referenced to rated power @ 8 ohms

Current Draw @ 1/8 power:
575 watts @ 4 ohms, 380 watts @ 8 ohms

Current Draw @ 1/3 power:
1185 watts @ 4 ohms, 860 watts @ 8 ohms

Idle Current Draw:
35 VA in Standby Mode

Maximum Current Draw:
2,760 VA (time limited by breaker)

Thermal Emissions (BTU/hr.):
940 @ 1/8 power 4 ohms,
615 @ 1/8 power 8 ohms,
1830 @ 1/3 power 4 ohms,
1335 @ 1/3 power @ 8 ohms

Cooling:
120 mm DC fan, off until heatsinks reach 45° C, then variable speed

Controls:
2 rear panel attenuators, sequential turn-on / off

Indicator LEDs:
2 Clip, 2 Signal, 2 LFC, 1 Protect, 1 Power

Protection:
Temp., DC, turn-on bursts, subsonic, incorrect load or short

Connectors:
8-pin plugable signal input, 4-pin plugable sequential power, 4-terminal barrier strip, IEC AC power connector

Construction:
All steel; 16 ga. chassis, 18 ga. top, 12 ga. rack ears

Dimensions:
5.25" x 19" x 16.4"
133 mm x 483 mm x 416.6 mm,

Gross Weight:
51.4 lbs. (23.3 kg.)

Net Weight:
45 lbs. (20.4 kg.)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

ICA™ 400V SPECIFICATIONS

Rated Power (two channels):
200 watts @ 20 Hz - 20 kHz both channels driven at <0.1% THD

Rated Power (one channel):
215 watts @ 1 kHz at <0.0075% THD

Minimum Load Impedance:
ICA 400V-70: 25 ohms
ICA 400V-100: 50 ohms

Maximum RMS Voltage Swing:
ICA 400V-70: 86 volts
ICA 400V-100: 116 volts

Frequency Response:
10 Hz - 25 kHz; +0, -.3 dB at 1 watt

Power Bandwidth:
ICA 400V-70:
10 Hz - 100 kHz; +0, -3 dB at rated power
ICA 400V-100:
10 Hz - 50 kHz; +0, -.3 dB at rated power

THD (two channels driven):
ICA 400V-70:
<0.1% @ 200 W from 20 Hz - 20 kHz with both channels driven
ICA 400V-100:
<0.15% @ 200 W from 20 Hz - 20 kHz with both channels driven

THD (one channel driven):
ICA 400V-70:
<0.005% @ 200 W @ 1 kHz
ICA 400V-100:
<0.015% @ 200 W @ 1 kHz

SMPTE IMD:
<0.1% 60 Hz and 7 kHz, 200 W

Slew Rate:
ICA 400V-70: 30 V/µs
ICA 400V-100: 40 V/µs

Damping Factor:
ICA 400V-70:
>1,000:1 @ 20 Hz - 400 Hz
ICA 400V-100:
>2,000:1 @ 20 Hz - 400 Hz

Input CMRR:
> -65 dB @ 1 kHz

Voltage Gain:
x40 (32 dB)

Input Sensitivity:
ICA 400V-70:
1.77 volts for rated output
ICA 400V-100:
2.5 volts for rated output

Input Impedance:
20 k ohms, balanced

Hum and Noise:
> -110 dB, "A" weighted referenced to rated power

Crosstalk:
ICA 400V-70:
>-70 dB, "A" weighted referenced to rated power
ICA 400V-100:
>-65 dB, "A" weighted referenced to rated power

Current Draw @ 1/8 power:
ICA 400V-70: 415 watts
ICA 400V-100: 385 watts

Current Draw @ 1/3 power:
ICA 400V-70: 600 watts
ICA 400V-100: 565 watts

Idle Current Draw:
ICA 400V-70:
38 watts in Standby Mode
ICA 400V-100:
43 watts in Standby Mode

Maximum Current Draw:
ICA 400V-70:
970 watts for rated power
ICA 400V-100:
840 watts for rated power

Thermal Emissions (BTU/hr.):
500 @ 1/3 power,
350 @ 1/8 power

Cooling:
80 mm DC fan, off until heatsinks reach 45° C, then variable speed

Controls:
2 rear panel attenuators, sequential turn-on / off

Indicator LEDs:
2 Clip, 2 Signal, 2 LFC, 1 Protect, 1 Power

Protection:
Temp., DC, turn-on bursts, subsonic, incorrect load or short

Connectors:
8-pin plugable signal input, 4-pin plugable sequential power, 4-terminal barrier strip, IEC AC power connector

Construction:
All steel; 16 ga. chassis, 18 ga. top, 12 ga. rack ears

Dimensions:
3.48" x 19" x 16.4"
88.4 mm x 483 mm x 416.6 mm

Gross Weight:
33.5 lbs. (15.2 kg.)

Net Weight:
31 lbs. (14 kg.)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

ICA™ 800V SPECIFICATIONS

Rated Power (two channels):
400 watts @ 20 Hz - 20 kHz both channels driven at < 0.1% THD

Rated Power (one channel):
415 watts @ 1 kHz at < 0.01% THD

Minimum Load Impedance:
ICA 800V-70: 12.5 ohms
ICA 800V-100: 25 ohms

Maximum RMS Voltage Swing:
ICA 800V-70: 85 volts
ICA 800V-100: 110 volts

Frequency Response:
10 Hz - 25 kHz; +0, -.3 dB at 1 watt

Power Bandwidth:
ICA 800V-70:
10 Hz - 100 kHz; +0, -3 dB at rated power
ICA 800V-100:
10 Hz - 50 kHz; +0, -3 dB at rated power

THD (two channels driven):
ICA 800V-70:
<0.15% @ 400 W from 20 Hz - 20 kHz with both channels driven
ICA 800V-100:
<0.1% @ 400 W from 20 Hz - 20 kHz with both channels driven

THD (one channel driven):
<0.008% @ 400 W @ 1 kHz

SMPTE IMD:
<0.1% 60 Hz and 7 kHz, @ 400 W

Slew Rate:
35 V/µs

Damping Factor:
>400:1 @ 20 Hz - 400 Hz

Input CMRR:
>-65 dB @ 1 kHz

Voltage Gain:
x40 (32 dB)

Input Sensitivity:
ICA 800V-70:
1.77 volts for rated output
ICA 800V-100:
2.5 volts for rated output

Input Impedance:
20 k ohms, balanced

Hum and Noise:
> -108 dB, "A" weighted referenced to rated power

Crosstalk:
> -65 dB, "A" weighted referenced to rated power

Current Draw @ 1/8 power:
ICA 800V-70: 765 watts
ICA 800V-100: 775 watts

Current Draw @ 1/3 power:
ICA 800V-70: 1,100 watts
ICA 800V-100: 1,150 watts

Idle Current Draw:
45 watts in Standby Mode

Maximum Current Draw:
ICA 800V-70:
1,680 watts for rated power
ICA 800V-100:
1,700 watts for rated power

Thermal Emissions (BTU/hr.):
550 @ 1/8 power,
835 @ 1/3 power

Cooling:
120 mm DC fan, off until heatsinks reach 45°C, then variable speed

Controls:
2 rear panel attenuators, sequential turn-on / off

Indicator LEDs:
2 Clip, 2 Signal, 2 LFC, 1 Protect, 1 Power

Protection:
Temp., DC, turn-on bursts, subsonic, incorrect load or short

Connectors:
8-pin plugable signal input, 4-pin plugable sequential power, 4-terminal barrier strip, IEC AC power connector

Construction:
All steel; 16 ga. chassis, 18 ga. top, 12 ga. rack ears

Dimensions:
5.25" x 19" x 16.4"
133 mm x 483 mm x 416.6 mm

Gross Weight:
51.4 lbs. (23.3 kg.)

Net Weight:
45 lbs. (20.4 kg.)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

ICA™ 2400V SPECIFICATIONS

Rated Power (two channels):
1200 watts @ 20 Hz to 20 kHz both channels driven at < 0.1% THD

Rated Power (one channel):
Awaiting test results

Topology:
Class H

Minimum Load Impedance:
@ 70.7 volts
6.3 ohms

Maximum RMS Voltage Swing:
95 volts

Frequency Response:
10 Hz – 25 kHz; +0, -.3 dB at 1 watt

Power Bandwidth:
10 Hz – 50 kHz; +0, -3 dB at rated power

THD (two channels driven):
<0.008% @ 800 W @ 1 kHz with both channels driven

THD (one channel driven):
<0.006% @ 830 W @ 1 kHz

SMPTE IMD:
<0.1% 60 Hz and 7 kHz, 800 W @ 8 ohms

Slew Rate:
35 V/us

Damping Factor:
>250:1 @ 20 Hz – 1 kHz

Input CMRR:
>65 dB @ 1 kHz

Voltage Gain:
x 40 (32 dB)

Input Sensitivity:
1.77 volts

Input Impedance:
20 k ohms, balanced

Hum and Noise:
>-115 dB, “A” weighted referenced to rated power

Crosstalk:
> -55 dB, “A” weighted referenced to rated power

Current Draw @ 1/8 power:
497 watts

Current Draw @ 1/3 power:
1037 watts

Idle Current Draw:
35 VA in Standby Mode

Maximum Current Draw:
2,760 VA (time limited by breaker)

Thermal Emissions (BTU/hr.):
940 @ 1/8 power,
1,830 @ 1/3 power

Cooling:
120 mm DC fan, off until heatsinks reach 45° C, then variable speed

Controls:
2 rear panel attenuators, sequential turn-on /-off:

Indicator LEDs:
2 Clip, 2 Signal, 2 LFC, 1 Protect, 1 Power

Protection:
Temp., DC, turn-on bursts, subsonic, incorrect load or short

Connectors:
8-pin plugable signal input, 4-pin plugable sequential power, 4-terminal barrier strip, IEC AC power connector

Construction:
All steel; 16 ga. chassis, 18 ga. top, 12 ga. rack ears

Dimensions:
5.23" x 19" x 16.4"
133 mm x 483 mm x 416mm

Gross Weight:
51.4 lbs. (23.3 kg.)

Net Weight:
45 lbs. (20.4 kg.)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

DEUTSCH

EINLEITUNG

Wir freuen uns, dass Sie sich für den Architectural Acoustics ICA (Industrial Contractor Amplifier) von Peavey Electronics entschieden haben. Bitte lesen Sie vor Inbetriebnahme des Geräts unbedingt die Bedienungsanleitung, insbesondere die SICHERHEITSHINWEISE auf der vorderen Umschlaginnenseite. Sie enthalten wichtige Hinweise zum Betrieb des Verstärkers. Jetzt ist auch der richtige Zeitpunkt, die beiliegende Registrierkarte auszufüllen und an Peavey Electronics zurück zu senden.

Verstärker der ICA-Serie setzen in Bezug auf Wertbeständigkeit und Flexibilität völlig neue Maßstäbe für die professionelle Tonbranche. Die ICA-Serie umfasst Verstärkermodelle, die speziell auf Ausgangsvarianten mit 4 Ohm sowie 70,7 und 100 Volt ausgelegt sind. 70,7- und 100-Volt-Systeme lassen sich auf diese Weise direkt betreiben, was die Frage nach geeigneten (Auto-)Übertragern erübrigt. Verstärker der ICA-Serie eignen sich für beinahe jedes festinstallierte bzw. dezentrale Beschallungssystem.

Verstärker der ICA-Serie sind äußerst robuste, aus hochwertigen Komponenten gefertigte Geräte, die zum Schutz gegen alle “Eventualitäten” mit umfassenden Schutzschaltungen ausgestattet sind.

Sollten Sie Unterstützung in Bezug auf Einrichtung oder Betrieb Ihres ICA-Leistungsverstärkers benötigen, wenden Sie sich an den Peavey Electronics-Kundendienst oder die nächstgelegene Peavey Electronics-Vertretung. Verbesserungsvorschläge zu unseren Produkten und/oder Serviceleistungen sind jeder Zeit willkommen.

AUSPACKEN

Sehen Sie sich den Verstärker beim Auspacken sorgfältig an und wenden sich bei Schäden sofort Ihren Fachhändler. Für Schadensersatzansprüche auf Grund von Transportschäden wenden Sie sich direkt an das jeweilige Transportunternehmen. Bewahren Sie den Karton und sämtliche Verpackungsmaterialien auf, da Sie diese im Servicefall benötigen, um das Gerät an Peavey Electronics, ein Peavey Service Center oder Ihren Fachhändler einzuschicken.

EINBAU UND ANSCHLUSS

Verstärker der ICA-Serie eignen sich für den Einbau in ein standardmäßiges 19"-Rack (2 bzw. 3 HE, Einbautiefe 400 mm). Zu diesem Zweck sind sämtliche Modelle frontseitig mit 4 Befestigungslöchern versehen. Für zusätzliche Stabilität sorgen die ebenfalls im Lieferumfang enthaltenen hinteren Rack-Halterungen. Der Abstand zwischen vorderer und hinterer Rack-Halterung (gemessen von der Rückseite der vorderen Rack-Halterung bis zur Mitte der hinteren Befestigungslöcher) beträgt 395 mm.

ERSTE SCHRITTE

1. Bauen Sie den Verstärker unter Beachtung der Platz- und Kühlungserfordernisse dort ein, wo Sie ihn später einsetzen möchten. Weitere Informationen hierzu finden Sie in den Kapiteln EINBAU UND ANSCHLUSS und KÜHLUNG.

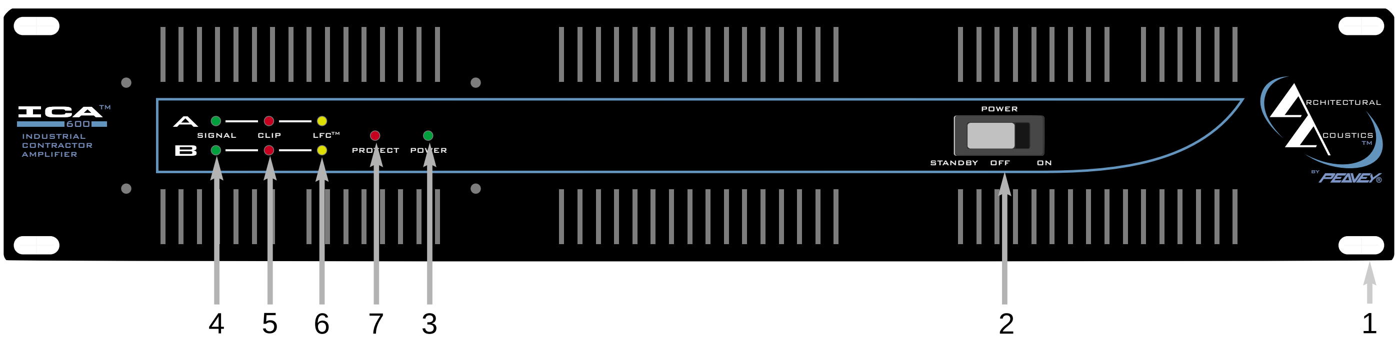
2. Schließen Sie die Kabel für den Signaleingang an die steckbare Reihenklemme auf der Verstärkerrückseite an, und beachten Sie dabei die unterschiedlichen Betriebsarten stereo, parallel und bridged mono sowie die korrekte Erdung. Weitere Informationen hierzu finden Sie in den Kapiteln BETRIEBSARTEN und EINGANGSMODULE.

3. Schließen Sie die Lautsprecher an die Ausgangs-Schraubklemmleiste an und beachten Sie dabei die unterschiedlichen Betriebsarten stereo, parallel und bridged mono. Weitere Informationen hierzu finden Sie im Kapitel LAUTSPRECHERANSCHLUSS.

4. Schließen Sie den Verstärker unter Beachtung der korrekten Spannung an das Stromnetz an. Weitere Informationen hierzu finden Sie in den Kapiteln EURO-NETZANSCHLUSS und LEISTUNGSBEDARF.

5. Schalten Sie den Dreifach-Netzschalter (POWER-Schalter) auf der Vorderseite in die ON-Position und stellen mittels der LEVEL-Regler (Gain-Dämpfung) auf der Rückseite den gewünschten Pegel ein.

VORDERSEITE



1. MONTAGEZUBEHÖR FÜR DEN RACK-EINBAU
Die beiden vorderen Rack-Winkel sind mit je zwei Befestigungslöchern versehen.

2. DREIFACH-NETZSCHALTER
Auf der Gerätefront befindet sich ein Dreifach-Netzschalter, da zu den Standardfunktionen des Verstärkers auch das zentrale, sequentielle Ein/Ausschalten per Fernbedienung zählt. Bei Schalterstellung "außen" (ON) ist der Verstärker ein-, in der Mittelposition (OFF) ausgeschaltet. Bei Schalterstellung "innen" befindet sich das Gerät im STANDBY-Betrieb. In dieser Betriebsart lässt sich der Verstärker über einen sequentiellen Einschaltkreis oder je nach Konfiguration auch per Computer steuern. Weitere Informationen hierzu finden Sie im Kapitel SEQUENTIELLES EIN/AUSSCHALTEN.

3. POWER-LED
Die POWER-LED leuchtet, wenn der Verstärker eingeschaltet ist.

4. SIGNAL-LED
Jeder Kanal ist mit einer SIGNAL-LED ausgestattet, die aufleuchtet, sobald am Verstärkerausgang ein Signal von mehr als 1 Volt anliegt.

5. CLIP-LED
Jeder Kanal ist mit einer CLIP-LED ausgestattet, die aufleuchtet, sobald der Verstärker übersteuert und der interne Schaltkreis zur Gain-Reduktion aktiviert wird, so dass der Verstärker weiterhin unter Volllast gefahren werden kann. Weitere Informationen hierzu finden Sie im Kapitel SCHUTZSCHALTUNGEN.

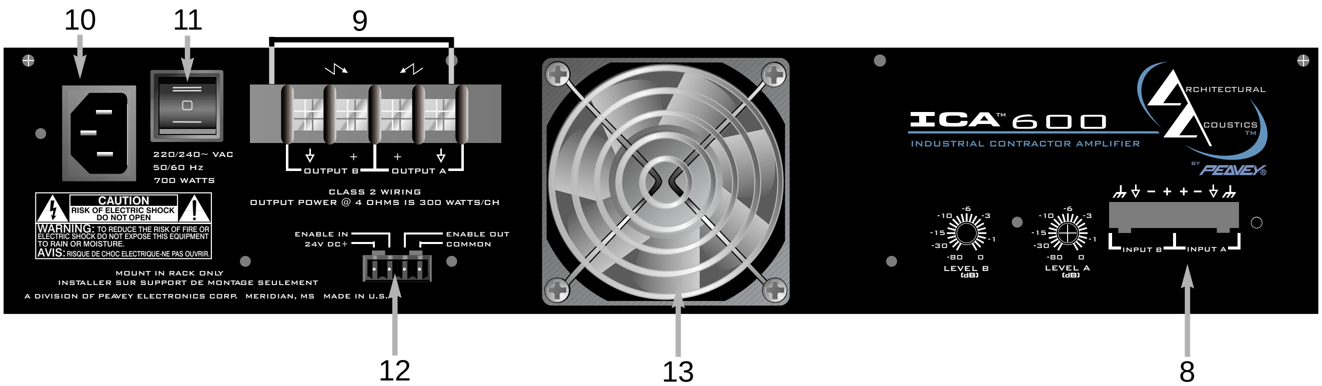
6. LFC-LED

Jeder Kanal ist mit einer LFC-(Load Fault Correction-)LED ausgestattet, die aufleuchtet, sobald der Verstärker ausgangsseitig eine nicht korrekte Last erkennt. Über die interne Schutzschaltung wird in diesem Fall sofort der Wert für die Eingangsverstärkung (Channel Gain) reduziert, so dass der Verstärker mit einem bei der jeweiligen Last sicheren Pegel weiter arbeitet. Weitere Informationen hierzu finden Sie im Kapitel SCHUTZSCHALTUNGEN.

7. PROTECT-LED

Diese LED leuchtet unmittelbar beim Einschalten des Verstärkers bzw. sobald ein Betriebsfehler erkannt wird und sich die Relays für den Lautsprecherausgang öffnen.

RÜCKSEITE



8. EINGANGSMODUL

ICA-Verstärker sind eingangsseitig serienmäßig mit steckbaren Reihenklemmen und zusätzlichen Trimmreglern für die Kanaldämpfung ausgestattet. Die entsprechenden internen Verbindungen für Spannungsverstärkung und Eingangsempfindlichkeit sind ab Werk auf einen Gesamt-Gain-Wert von 40 eingestellt. Darüber hinaus bietet das Eingangsmodul die Möglichkeit, die Masseführung des Audiosignals bei Bedarf abzutrennen.

9. AUSGANGS-SCHRAUBKLEMMLEISTE

Für den Lautsprecheranschluss steht eine Schraubklemmleiste bereit, die sich wahlweise für die Aufnahme von Einzelleitern (bis zu zwei Leiter à max. 2,5883 mm pro Terminal) oder den Anschluss über Kabelschuhe eignet.

10. EURO-NETZANSCHLUSS

In der oberen linken Ecke der Geräterückseite befindet sich ein standardmäßiger Euro-Netzanschluss, an den Sie das im Lieferumfang enthaltene und an die jeweilige Betriebsspannung angepasste Netzkabel anschließen.

11. SICHERUNG

Oben links auf der Geräterückseite finden Sie einen rücksetzbaren Wechselstrom-Sicherungsautomaten. Sollte dieser auslösen, brauchen Sie ihn lediglich herein zu drücken und der Verstärker ist wieder betriebsbereit. Für den Fall, dass der Sicherungsautomat erneut auslöst, sollten Sie das Gerät allerdings unbedingt überprüfen lassen. Ein wiederholtes Zurücksetzen kann zu gravierenden Schäden am Gerät führen und stellt zudem ein ernstzunehmendes Sicherheitsrisiko dar!

12. SEQUENTIELLE EIN/AUSSCHALT-FUNKTION

Verstärker der ICA-Serie sind serienmäßig mit einer fernsteuerbaren, sequentiellen Ein/Ausschaltfunktion ausgestattet, die durch das Schalten des Netzschalters in den STANDBY-Modus aktiviert wird. Wird an der rückwärtigen, 4-poligen steckbaren Reihenklemme eine Spannung von 12 - 24 V DC erkannt, schaltet sich der Verstärker bei bestehender Verbindung des ENABLE-Anschlusses mit dem 24 V DC+-Anschluss automatisch ein. Wenn keine Spannung anliegt oder die ENABLE-Verbindung nicht gesteckt ist, schaltet der Verstärker ab. Darüber hinaus lassen sich mehrere Verstärker der ICA-Serie "durchschleifen", indem Sie die 24 V DC+- und die COMMON-Anschlüsse aller Verstärker miteinander sowie den ENABLE OUT-Anschluss des ersten mit dem ENABLE IN-Anschluss des jeweils nächsten Verstärkers verbinden. (Eine geeignete Kupplung ist im Lieferumfang enthalten.)

13. LÜFTUNGSGITTER

Für die Frischluftzufuhr ins Verstärkerinnere sorgt ein stufenlos regelbarer Gleichstromlüfter, der nur dann einsetzt, wenn die Kühlkörper eine Kühlung des Verstärkers erforderlich machen. Versperren Sie niemals die zugehörige Ansaugöffnung!

BEDIENUNG

STROMBEDARF

Der Strombedarf der ICA-Verstärker wurde im "Leerlauf", bei 1/8 der Gesamtleistung ("typisch" für Musik), bei 1/3 der Gesamtleistung und unter Volllast ermittelt, wobei die maximale Stromaufnahme durch die Verstärkersicherung begrenzt wird. Die Werte für Ihr Verstärkermodell finden Sie in den Technischen Daten. Beachten Sie stets, dass die Netzspannung mit dem auf der Geräterückseite aufgedruckten Wert übereinstimmen muss. Der Hersteller haftet für keinerlei Schäden, die durch den Anschluss des Verstärkers an eine ungeeignete Netzspannung entstehen. *HINWEIS: Trennen Sie den Verstärker stets vom Netz, bevor Sie Audioverbindungen stecken oder verändern. Zusätzlich ist es ratsam, die Eingangs-Trimmpotentiometer während des Einschaltvorgangs ganz zurück zu drehen.*

KÜHLUNG

Verstärker der ICA-Serie sind zur Gewährleistung einer gleichmäßig niedrigen Arbeitstemperatur mit einer Zwangskühlung ausgestattet, d.h. die Frischluft wird mittels des stufenlos regelbaren Lüfters auf der Rückseite des Verstärkers ins Geräteinnere und über Lüftungsschlitze auf der Vorderseite wieder hinaus geführt. Die Lüftung setzt ein, sobald die Arbeitstemperatur im Inneren des Geräts 45 ∞C überschreitet. Sorgen Sie stets für ausreichend Platz um den Verstärker herum, damit eine ungehinderte Frischluftzufuhr gewährleistet ist. *HINWEIS (bei Rack-Einbau): Verschließen Sie das Rack weder vorne noch hinten mit Türen oder anderen Abdeckungen, es sei denn, die Rückseite wird zwangsbelüftet. Ungeachtet des Rack-Typs sollten Sie stets darauf achten, dass jegliche Hitze ungehindert entweichen kann und die rückseitige Ansaugöffnung unversperrt bleibt. Das freie Ansaugen und Ausstoßen der Luft ist für einen reibungslosen Betrieb unerlässlich.*

SLEEP-FUNKTION

Alle Verstärker der ICA-Serie sind mit einer Sleep-Funktion ausgestattet, die dafür sorgt, dass Stromzufuhr und Wärmeentwicklung auf ein Minimum reduziert werden, wenn länger als eine Minute kein Eingangssignal erkannt wird. Sobald wieder ein Signal anliegt, versetzt die Sleep-Schaltung den Verstärker zurück in den normalen Betriebszustand. Die Stromaufnahme bei aktivierter Sleep-Funktion finden Sie in den Technischen Daten unter "Ruhestrom".

WÄRMEENTWICKLUNG

Die speziellen Kühlungsanforderungen Ihres Systems sollte der jeweils zuständige Techniker am besten beurteilen können. Die Wärmewerte für Ihr(e) Verstärkermodell(e) finden Sie in den Technischen Daten hinten in dieser Bedienungsanleitung.

EINGANGSMODUL

Das Eingangsmodul ist auf symmetrische und unsymmetrische Verbindungen ausgelegt. Bei unsymmetrischen Audiosignalen ist es erforderlich, den mit Minus (-) bezeichneten Eingang mittels eines Verbindungskabels an Masse anzuschließen, da sich anderenfalls ein Gain-Verlust von 6 dB ergibt.

BETRIEBSARTEN

⚠ Verstärker der ICA-Serie sind eingangsseitig auf Stereo- (2-Kanal-), Brücken- und Parallel-Betrieb ausgelegt.

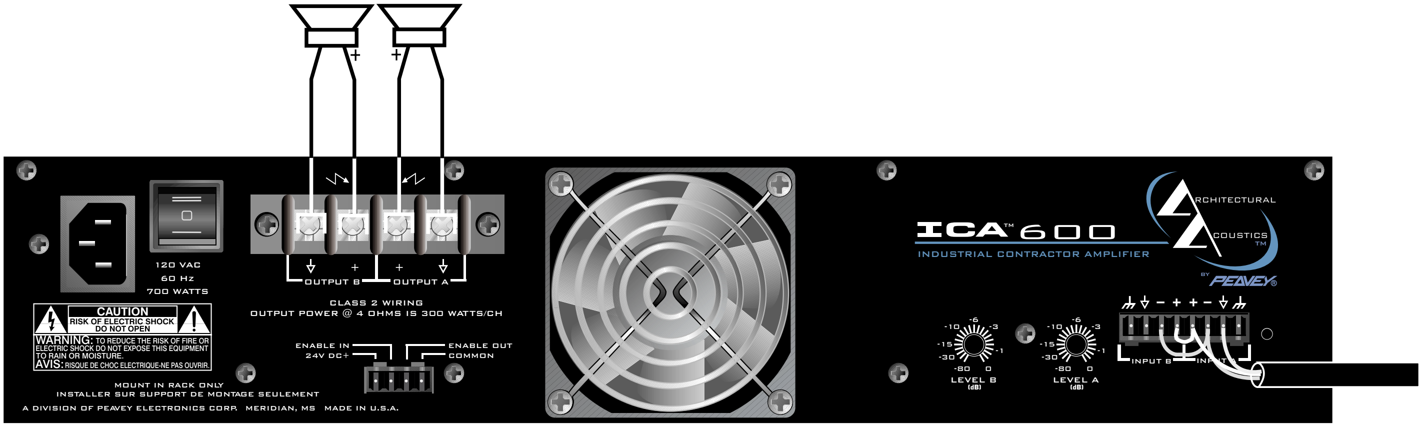
Möchten Sie ein und das selbe Signal auf beide Kanäle legen (Parallel-Betrieb), belegen Sie CHANNEL A des Eingangsmoduls und führen Verbindungskabel von den mit Plus bzw. Minus bezeichneten Terminals von CHANNEL A auf die entsprechenden Terminals von CHANNEL B. Anschließend liegt auf beiden Kanälen das Eingangssignal von CHANNEL A an, sie arbeiten jedoch unabhängig voneinander. Der Anschluss der Lautsprecher erfolgt in der gleichen Weise wie im Abschnitt Stereo-Betrieb beschrieben.

Im Brückenbetrieb (“Bridged Mode”) arbeitet der Verstärker einkanalig, wobei die Verstärkerleistung der Summe beider Kanäle entspricht und die Lastwerte zu verdoppeln sind. Im Brückenbetrieb arbeiten die beiden Verstärkerkanäle mit jeweils umgekehrter Polarität – man könnte also sagen, der eine Kanal “schiebt” und der andere “zieht” im gleichen Verhältnis. Verbinden Sie hierzu den Plus-Terminal (+) von Eingang A mit dem Minus-Terminal (-) von Eingang B, sowie den Minus-Terminal (-) von Eingang A mit dem Plus-Terminal (+) von Eingang B. Die Signalpegel der Kanäle (A & B) stellen Sie mittels der zugehörigen Trimmpotentiometer ein (der Dämpfungswert muss bei beiden Kanälen gleich sein, idealerweise 0 dB). Verbinden Sie nun die Lautsprecher mit den entsprechenden Ausgangs-Terminals (“+”). Schließen Sie Lautsprecherkabel im Brückenbetrieb ***NIEMALS an Masse an, da beide Leiter “signalführend” sind.*** Sollten Sie für das Routing der Ausgänge eine Patchbay einsetzen, müssen sämtliche Verbindungen voneinander und von der Patchbay isoliert sein. Für Verstärker der ICA-Serie gilt im Brückenbetrieb eine nominale Mindestlastimpedanz von 8 Ohm (entsprechend 4 Ohm bei zwei Kanälen). Lastimpedanzen unter 8 Ohm können in diesem Fall ein Auslösen der Lastfehlerkorrektur (LFC) und/oder des Überhitzungsschutzes bewirken. ***Hinweis:*** Verbinden Sie Verstärkerausgänge ***NIEMALS miteinander – ungeachtet der Betriebsart!***

STEREO-BETRIEB



PARALLEL-BETRIEB



BRÜCKENBETRIEB



LAUTSPRECHERANSCHLUSS

Der Lautsprecheranschluss erfolgt über Schraubklemmleisten, die sich für den Anschluss von offenen oder geschlossenen Kabelschuhen sowie die Aufnahme von Einzelleitern (bis zu zwei Leiter à max. 2,5883 mm pro Terminal) eignen. *Vergewissern Sie sich stets, dass der Verstärker ausgeschaltet ist, bevor Sie Lautsprecher- oder andere Verbindungen verändern.* Informationen zu optimalen Lautsprecherkabelstärken für ein Minimum an Verlustleistung finden Sie in der Kabel-Tabelle im Anhang zu dieser Bedienungsanleitung. Achten Sie zudem stets darauf, dass die Lastimpedanz die für das jeweilige Verstärkermodell angegebene Mindestlastimpedanz nicht unterschreitet.

SIGNALERDUNG

Eingangsseitige Verbindungen lassen sich mit oder ohne Masseschluss realisieren. Wenn möglich, sollte die Abschirmung des Anschlusskabels für die Signalquelle stets mit der Gehäusemasse (Signalerde) verbunden sein. In manchen Fällen jedoch bewirkt dies eine Erdschleife, insbesondere, wenn der Verstärker in ein bereits bestehendes System eingebunden wird. Verbinden Sie dann lediglich die Abschirmung mit der Gehäusemasse, die wiederum geräteintern geerdet ist (das Spannungspotential ist in diesem Fall auf einen Spannungsbereich von ±0,6 V begrenzt).

SCHUTZSCHALTUNGEN

Ihre hohe Zuverlässigkeit verdanken Peavey-Produkte jahrelanger Erfahrung. Verstärker der ICA-Serie sind äußerst robuste, aus hochwertigen Komponenten gefertigte Geräte, die zum Schutz gegen alle “Eventualitäten” mit umfassenden Schutzschaltungen ausgestattet sind.

CLIP-LIMITER
Wird der Verstärker unter Volllast – d.h. kurz vor dem Clipping (Übersteuern) – gefahren, sorgt der integrierte Clip-Limiter für eine automatische Reduktion der Eingangsverstärkung und schützt die Lautsprecher so gegen Überlastung und das kontinuierliche Auftreten schädigender Rechteckwellen. Angezeigt wird dies durch die CLIP-LED. Signalübliche Transienten lassen den Clip-Limiter jedoch nicht ansprechen, da dieser lediglich der Verhinderung massiver bzw. kontinuierlicher Übersteuerung dient. Die Schutzschaltung arbeitet dabei ausgesprochen transparent und unter Erhaltung der vollständigen Bandbreite des Signals.

LASTFEHLERKORREKTUR
LFC (Load Fault Correction) bezeichnet eine innovative Schutzschaltung, die für eine sofortige Reduktion der Eingangsverstärkung (d.h. einen “sicheren” Pegel) sorgt, wenn der Verstärker mit einer ungeeigneten Last betrieben wird. Angezeigt wird eine Aktivierung der LFC-Schutzschaltung durch die LFC-LED. Greift die Lastfehlerkorrektur nur leicht ein, ist dies in der Regel unhörbar. Bei extrem niedriger Impedanz oder Kurzschluss und einem sehr hohen Signalpegel öffnet sich allerdings zusätzlich das Ausgangs-Relay.

EINSCHALTVERZÖGERUNG
Die Einschaltverzögerung ist bei jedem Einschalten des Verstärkers, auch beim Wiederaktivieren nach dem Ansprechen einer Schutzschaltung, aktiv. Während des Einschaltens wechselt der Verstärker kurzzeitig in den “Protect”-Modus, der eine Abtrennung der Lautsprecherverbindung(en) bewirkt, bis das Gerät den normalen Betriebszustand erreicht hat. Die Einschaltverzögerung sorgt dabei für eine Dämpfung des Signals mit anschließender allmählicher Erhöhung der Eingangsverstärkung bis zu dem durch den Dämpfungsregler vorgegebenen Wert. Auf diese Weise werden unnötige Belastungen der Lautsprecher vermieden.

ÜBERHITZUNGSSCHUTZ
Sollte der Verstärker am Kühlkörper oder am Netzteil überhitzen, bewirkt diese Schutzschaltung eine Abtrennung der Lautsprecherverbindung(en), bis wieder die normale Betriebstemperatur erreicht ist. Währenddessen leuchtet die PROTECT-LED und der Lüfter arbeitet mit maximaler Geschwindigkeit.

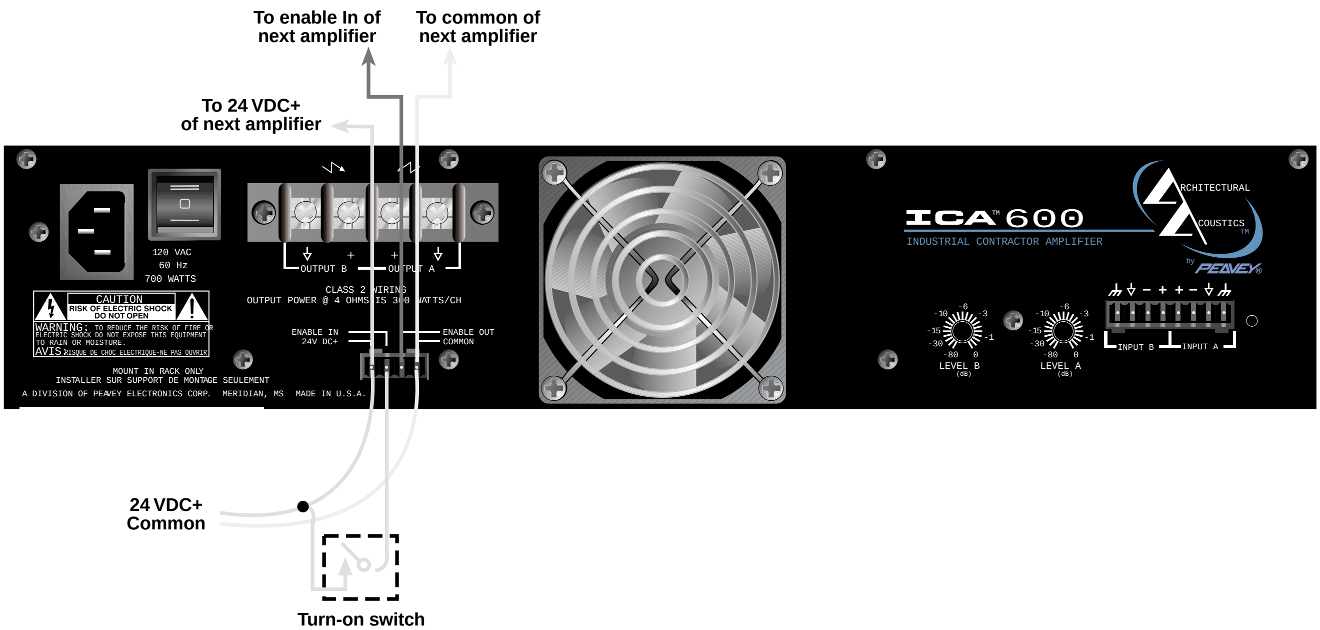
KURZSCHLUSSSCHUTZ
Wird ausgangsseitig ein Kurzschluss erkannt, ist der Verstärker automatisch durch Schutzschaltungen wie LFC und Überhitzungsschutz sowie das Lautsprecher-Relay geschützt. Die Lastfehlerkorrektur (LFC) erkennt den Kurzschlusszustand als unkorrekte Last und sorgt sofort für eine Reduktion der Eingangsverstärkung auf einen sicheren Wert. Unter sehr extremen Bedingungen trennen die Lautsprecher-Relays die Last ab und bewirken damit einen Neustart.

GLEICHSTROMSCHUTZ
Werden im Ausgangssignal Gleichstrom- oder Subbassanteile erkannt, öffnet sich zur Verhinderung von Lautsprecherschäden sofort das Lautsprecher-Relay. Angezeigt wird dies durch die PROTECT-LED.

SEQUENTIELLES EIN/AUSSCHALTEN
Verstärker der ICA-Serie sind serienmäßig mit einer fernsteuerbaren, sequentiellen Ein/Ausschaltfunktion ausgestattet, die durch das Schalten des frontseitigen Netzschalters in die STANDBY-Position aktiviert wird. Schließen Sie zu diesem Zweck ein externes Steuernetzteil mit einer Nennspannung zwischen 12 und 24 V DC an den vierpoligen Terminal auf der Geräterückseite an. Verbinden Sie anschließend den ENABLE OUT-Anschluss mit dem ENABLE IN-Anschluss des

nächsten Verstärkers. Verstärker der ICA-Serie lassen sich parallel schalten (“durchschleifen”) und – durch Verbindung aller 24 V DC+- und COMMON-Anschlüsse miteinander – an die Steuerspannung anbinden. Beachten Sie, dass zur Initiierung des Einschaltvorgangs des ersten und sämtlicher nachfolgender Verstärker zwischen dem 24 V DC+-Terminal und dem ENABLE OUT-Anschluss des ersten Verstärkers ein einpoliger Schalter (SPST) erforderlich ist.

Verkabelung (Sequentielle Ein/Ausschalt-Funktion)



WIRE GAUGE CHART

Cable Length (Feet)	Stranded Wire Gauge (AWG)	Power Loss Into 8 ohms	Power Loss Into 4 ohms	Power Loss Into 2 ohms
5'	18 AWG	.79%	1.58%	3.16%
	16	.5	1.0	2.0
	14	.31	.62	1.24
	12	.20	.40	.80
	10	.125	.25	.50
10'	18 AWG	1.58%	3.16%	6.32%
	16	1.0	2.0	4.00
	14	.62	1.25	2.50
	12	.40	.80	1.6
	10	.25	.50	1.0
40'	18 AWG	8.0%	12.6%	25.2%
	16	4.0	8.0	16.0
	14	2.5	5.0	10.0
	12	1.60	3.2	6.4
	10	1.0	2.0	4.0
	8	.625	1.25	2.50
80'	16 AWG	8.0%	16.0%	32.0%
	14	5.0	10.0	20.0
	12	3.2	6.4	12.8
	10	2.0	4.0	8.0

ICA™ 600 SPECIFICATIONS

Rated Power (2 X 4 ohms):
300 watts @ 20 Hz - 20 kHz, both channels driven at < 0.1% THD

Rated Power (2 x 8 ohms):
200 watts @ 20 Hz - 20 kHz at < 0.05% THD

Rated Power (1 x 4 ohms):
360 watts @ 1 kHz at < 0.015% THD

Rated Power (1 x 8 ohms):
275 watts @ 1 kHz at < 0.005% THD

Minimum Load Impedance:
4 ohms

Maximum RMS Voltage Swing:
57 volts

Frequency Response:
10 Hz - 25 kHz; +0, -3 dB at 1 watt

Power Bandwidth:
10 Hz - 100 kHz; +0, -3 dB at rated power

THD (2 x 4 ohms):
<0.1% @ 300 W from 20 Hz - 20 kHz with both channels driven

THD (2 x 8 ohms):
<0.05% @ 200 W from 20 Hz - 20 kHz with both channels driven

THD (1 x 4 ohms):
<0.01% @ 350 W @ 1 kHz

THD (1 x 8 ohms):
<0.005% @ 275 W @ 1 kHz

SMPTE IMD:
<0.1% 60 Hz and 7 kHz, 300 W @ 4 ohms

Slew Rate:
30 V/µs

Damping Factor (8 ohms):
>450:1 @ 20 Hz - 1 kHz

Input CMRR:
>-65 dB @ 1 kHz

Voltage Gain:
x40 (32 dB)

Input Sensitivity:
.866 volts @ 4 ohms, 1 volt @ 8 ohms

Input Impedance:
20 k ohms, balanced

Hum and Noise:
>-108 dB, “A” weighted referenced to rated power @ 8 ohms

Crosstalk:
>-75 dB, “A” weighted referenced to rated power @ 8 ohms

Current Draw @ 1/8 power:
670 watts @ 4 ohms, 460 watts @ 8 ohms

Current Draw @ 1/3 power:
1,055 watts @ 4 ohms, 650 watts @ 8 ohms

Idle Current Draw:
30 watts in Standby Mode

Maximum Current Draw:
1,622 watts @ 4 ohms, 1,010 watts @ 8 ohms

Thermal Emissions (BTU/hr.):
625 @ 1/3 power 4 ohms,
500 @ 1/3 power 8 ohms,
395 @ 1/8 power 4 ohms,
350 @ 1/8 power 8 ohms

Cooling:
80 mm DC fan, off until heatsinks reach 45° C, then variable speed

Controls:
2 rear panel attenuators, sequential turn-on / off

Indicator LEDs:
2 Clip, 2 Signal, 2 LFC, 1 Protect, 1 Power

Protection:
Temp., DC, turn-on bursts, subsonic, incorrect load or short

Connectors:
8-pin plugable signal input, 4-pin plugable sequential power, 4-terminal barrier strip, IEC AC power connector

Construction:
All steel; 16 ga. chassis, 18 ga. top, 12 ga. rack ears

Dimensions:
3.48" x 19" x 16.4"
88.4 mm x 483 mm x 416.6 mm

Gross Weight:
33.6 lbs. (15.25 kg)

Net Weight:
30.2 lbs. (13.7 kg)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

ICA™ 1200 SPECIFICATIONS

Rated Power (2 X 4 ohms):
600 watts @ 20 Hz - 20 kHz, both channels driven at < 0.1% THD

Rated Power (2 X 8 ohms):
400 watts @ 20 Hz - 20 kHz, both channels driven at < 0.05% THD

Rated Power (1 X 4 ohms):
700 watts @ 1 kHz at < 0.008% THD

Rated Power (1 X 8 ohms):
425 watts @ 1 kHz at < 0.005% THD

Minimum Load Impedance:
4 ohms

Maximum RMS Voltage Swing:
70 volts

Frequency Response:
10 Hz - 25 kHz; +0, -.3 dB at 1 watt

Power Bandwidth:
10 Hz - 100 kHz; +0, -3 dB at rated power

THD (2 x 4 ohms):
<0.1% @ 600 W from 20 Hz - 20 kHz with both channels driven

THD (2 x 8 ohms):
<0.05% @ 400 W from 20 Hz - 20 kHz with both channels driven

THD (1 X 4 ohms):
<0.008% @ 700 W @ 1 kHz

THD (1 X 8 ohms):
<0.005% @ 425 W @ 1 kHz

SMPTE IMD:
<0.1% 60 Hz and 7 kHz, 600 W @ 4 ohms

Slew Rate:
30 V/µs

Damping Factor (8 ohms):
>350:1 @ 20 Hz - 1 kHz

Input CMRR:
>-65 dB @ 1 kHz

Voltage Gain:
x40 (32 dB)

Input Sensitivity:
1.22 volts @ 4 ohms, 1.41 volts @ 8 ohms

Input Impedance:
20 k ohms, balanced

Hum and Noise:
>-110 dB, "A" weighted referenced to rated power

Crosstalk:
>-65 dB, "A" weighted referenced to rated power

Current Draw @ 1/8 power:
950 watts @ 4 ohms, 725 watts @ 8 ohms

Current Draw @ 1/3 power:
1,750 watts @ 4 ohms, 1,150 watts @ 8 ohms

Idle Current Draw:
32 watts in Standby Mode

Maximum Current Draw:
2,670 watts @ 4 ohms (time limited by breaker), 1,725 watts @ 8 ohms

Thermal Emissions (BTU/hr.):
1,100 @ 1/3 power 4 ohms,
850 @ 1/3 power 8 ohms,
635 @ 1/8 power 4 ohms,
540 @ 1/8 power 8 ohms

Cooling
120 mm DC fan, off until heatsinks reach 45° C, then variable speed

Controls:
2 rear panel attenuators, sequential turn-on / off

Indicator LEDs:
2 Clip, 2 Signal, 2 LFC, 1 Protect, 1 Power

Protection:
Temp., DC, turn-on bursts, subsonic, incorrect load or short

Connectors:
8-pin plugable signal input, 4-pin plugable sequential power, 4-terminal barrier strip, IEC AC power connector

Construction:
All steel; 16 ga. chassis, 18 ga. top, 12 ga. rack ears

Dimensions:
5.25" x 19" x 16.4"
133 mm x 483 mm x 416.6 mm

Gross Weight:
51.4 lbs. (23.3 kg)

Net Weight:
45 lbs. (20.4 kg)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

ICA™ 2400 SPECIFICATIONS

Rated Power (2 x 4 ohms):
1200 watts @ 20 Hz - 20 kHz both channels driven at < 0.1% THD

Rated Power (2 x 8 ohms):
800 watts @ 20 Hz – 20 kHz both channels driven at < 0.08% THD

Rated Power (1 x 4 ohms):
1325 watts @ 1 kHz at < 0.08% THD

Rated Power (1 x 8 ohms):
830 watts @ 1 kHz at < 0.08% THD

Topology:
Class H

Minimum Load Impedance:
4 ohms

Maximum RMS Voltage Swing:
95 volts

Frequency Response:
10 Hz – 25 kHz; +0, -.3 dB at 1 watt

Power Bandwidth:
10 Hz – 50 kHz; +0, -3 dB at rated power

THD (2 x 4 ohms):
<0.025% @ 1200 W @ 1 kHz with both channels driven

THD (2 x 8 ohms):
<0.008% @ 800 W @ 1 kHz with both channels driven

THD (1 x 4 ohms):
<0.015% @ 1325 W @ 1kHz

THD (1 x 8 ohms):
<0.006% @ 830 W @ 1kHz

SMPTE IMD:
<0.1% 60 Hz and 7 kHz, 800 W @ 8 ohms

Slew Rate:
35 V/us

Damping Factor (8 ohms):
>250:1 @ 20 Hz – 1 kHz

Input CMRR:
> 65 dB @ 1 kHz

Voltage Gain:
x 40 (32 dB)

Input Sensitivity:
1.73 volts @ 4 ohms, 2 volts @ 8 ohms

Input Impedance:
20 k ohms, balanced

Hum and Noise:
>-115 dB, “A” weighted referenced to rated power @ 8 ohms

Crosstalk:
>-55 dB, “A” weighted referenced to rated power @ 8 ohms

Current Draw @ 1/8 power:
575 watts @ 4 ohms, 380 watts @ 8 ohms

Current Draw @ 1/3 power:
1185 watts @ 4 ohms, 860 watts @ 8 ohms

Idle Current Draw:
35 VA in Standby Mode

Maximum Current Draw:
2,760 VA (time limited by breaker)

Thermal Emissions (BTU/hr.):
940 @ 1/8 power 4 ohms,
615 @ 1/8 power 8 ohms,
1830 @ 1/3 power 4 ohms,
1335 @ 1/3 power @ 8 ohms

Cooling:
120 mm DC fan, off until heatsinks reach 45° C, then variable speed

Controls:
2 rear panel attenuators, sequential turn-on / off

Indicator LEDs:
2 Clip, 2 Signal, 2 LFC, 1 Protect, 1 Power

Protection:
Temp., DC, turn-on bursts, subsonic, incorrect load or short

Connectors:
8-pin plugable signal input, 4-pin plugable sequential power, 4-terminal barrier strip, IEC AC power connector

Construction:
All steel; 16 ga. chassis, 18 ga. top, 12 ga. rack ears

Dimensions:
5.25" x 19" x 16.4"
133 mm x 483 mm x 416.6 mm,

Gross Weight:
51.4 lbs. (23.3 kg.)

Net Weight:
45 lbs. (20.4 kg.)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

ICA™ 400V SPECIFICATIONS

Rated Power (two channels):
200 watts @ 20 Hz - 20 kHz both channels driven at <0.1% THD

Rated Power (one channel):
215 watts @ 1 kHz at <0.0075% THD

Minimum Load Impedance:
ICA 400V-70: 25 ohms
ICA 400V-100: 50 ohms

Maximum RMS Voltage Swing:
ICA 400V-70: 86 volts
ICA 400V-100: 116 volts

Frequency Response:
10 Hz - 25 kHz; +0, -.3 dB at 1 watt

Power Bandwidth:
ICA 400V-70:
10 Hz - 100 kHz; +0, -3 dB at rated power
ICA 400V-100:
10 Hz - 50 kHz; +0, -.3 dB at rated power

THD (two channels driven):
ICA 400V-70:
<0.1% @ 200 W from 20 Hz - 20 kHz with both channels driven
ICA 400V-100:
<0.15% @ 200 W from 20 Hz - 20 kHz with both channels driven

THD (one channel driven):
ICA 400V-70:
<0.005% @ 200 W @ 1 kHz
ICA 400V-100:
<0.015% @ 200 W @ 1 kHz

SMPTE IMD:
<0.1% 60 Hz and 7 kHz, 200 W

Slew Rate:
ICA 400V-70: 30 V/µs
ICA 400V-100: 40 V/µs

Damping Factor:
ICA 400V-70:
>1,000:1 @ 20 Hz - 400 Hz
ICA 400V-100:
>2,000:1 @ 20 Hz - 400 Hz

Input CMRR:
> -65 dB @ 1 kHz

Voltage Gain:
x40 (32 dB)

Input Sensitivity:
ICA 400V-70:
1.77 volts for rated output
ICA 400V-100:
2.5 volts for rated output

Input Impedance:
20 k ohms, balanced

Hum and Noise:
> -110 dB, "A" weighted referenced to rated power

Crosstalk:
ICA 400V-70:
>-70 dB, "A" weighted referenced to rated power
ICA 400V-100:
>-65 dB, "A" weighted referenced to rated power

Current Draw @ 1/8 power:
ICA 400V-70: 415 watts
ICA 400V-100: 385 watts

Current Draw @ 1/3 power:
ICA 400V-70: 600 watts
ICA 400V-100: 565 watts

Idle Current Draw:
ICA 400V-70:
38 watts in Standby Mode
ICA 400V-100:
43 watts in Standby Mode

Maximum Current Draw:
ICA 400V-70:
970 watts for rated power
ICA 400V-100:
840 watts for rated power

Thermal Emissions (BTU/hr.):
500 @ 1/3 power,
350 @ 1/8 power

Cooling:
80 mm DC fan, off until heatsinks reach 45°C, then variable speed

Controls:
2 rear panel attenuators, sequential turn-on / off

Indicator LEDs:
2 Clip, 2 Signal, 2 LFC, 1 Protect, 1 Power

Protection:
Temp., DC, turn-on bursts, subsonic, incorrect load or short

Connectors:
8-pin plugable signal input, 4-pin plugable sequential power, 4-terminal barrier strip, IEC AC power connector

Construction:
All steel; 16 ga. chassis, 18 ga. top, 12 ga. rack ears

Dimensions:
3.48" x 19" x 16.4"
88.4 mm x 483 mm x 416.6 mm

Gross Weight:
33.5 lbs. (15.2 kg.)

Net Weight:
31 lbs. (14 kg.)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

ICA™ 800V SPECIFICATIONS

Rated Power (two channels):
400 watts @ 20 Hz - 20 kHz both channels driven at < 0.1% THD

Rated Power (one channel):
415 watts @ 1 kHz at < 0.01% THD

Minimum Load Impedance:
ICA 800V-70: 12.5 ohms
ICA 800V-100: 25 ohms

Maximum RMS Voltage Swing:
ICA 800V-70: 85 volts
ICA 800V-100: 110 volts

Frequency Response:
10 Hz - 25 kHz; +0, -.3 dB at 1 watt

Power Bandwidth:
ICA 800V-70:
10 Hz - 100 kHz; +0, -3 dB at rated power
ICA 800V-100:
10 Hz - 50 kHz; +0, -3 dB at rated power

THD (two channels driven):
ICA 800V-70:
<0.15% @ 400 W from 20 Hz - 20 kHz with both channels driven
ICA 800V-100:
<0.1% @ 400 W from 20 Hz - 20 kHz with both channels driven

THD (one channel driven):
<0.008% @ 400 W @ 1 kHz

SMPTE IMD:
<0.1% 60 Hz and 7 kHz, @ 400 W

Slew Rate:
35 V/µs

Damping Factor:
>400:1 @ 20 Hz - 400 Hz

Input CMRR:
>-65 dB @ 1 kHz

Voltage Gain:
x40 (32 dB)

Input Sensitivity:
ICA 800V-70:
1.77 volts for rated output
ICA 800V-100:
2.5 volts for rated output

Input Impedance:
20 k ohms, balanced

Hum and Noise:
> -108 dB, "A" weighted referenced to rated power

Crosstalk:
> -65 dB, "A" weighted referenced to rated power

Current Draw @ 1/8 power:
ICA 800V-70: 765 watts
ICA 800V-100: 775 watts

Current Draw @ 1/3 power:
ICA 800V-70: 1,100 watts
ICA 800V-100: 1,150 watts

Idle Current Draw:
45 watts in Standby Mode

Maximum Current Draw:
ICA 800V-70:
1,680 watts for rated power
ICA 800V-100:
1,700 watts for rated power

Thermal Emissions (BTU/hr.):
550 @ 1/8 power,
835 @ 1/3 power

Cooling:
120 mm DC fan, off until heatsinks reach 45° C, then variable speed

Controls:
2 rear panel attenuators, sequential turn-on / off

Indicator LEDs:
2 Clip, 2 Signal, 2 LFC, 1 Protect, 1 Power

Protection:
Temp., DC, turn-on bursts, subsonic, incorrect load or short

Connectors:
8-pin plugable signal input, 4-pin plugable sequential power, 4-terminal barrier strip, IEC AC power connector

Construction:
All steel; 16 ga. chassis, 18 ga. top, 12 ga. rack ears

Dimensions:
5.25" x 19" x 16.4"
133 mm x 483 mm x 416.6 mm

Gross Weight:
51.4 lbs. (23.3 kg.)

Net Weight:
45 lbs. (20.4 kg.)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

ICA™ 2400V SPECIFICATIONS

Rated Power (2 x 4 ohms):
1200 watts @ 20 Hz - 20 kHz both channels driven at < 0.1% THD

Rated Power (2 x 8 ohms):
800 watts @ 20 Hz – 20 kHz both channels driven at < 0.08% THD

Rated Power (1 x 4 ohms):
1325 watts @ 1 kHz at < 0.08% THD

Rated Power (1 x 8 ohms):
830 watts @ 1 kHz at < 0.08% THD

Topology:
Class H

Minimum Load Impedance:
4 ohms

Maximum RMS Voltage Swing:
95 volts

Frequency Response:
10 Hz – 25 kHz; +0, -.3 dB at 1 watt

Power Bandwidth:
10 Hz – 50 kHz; +0, -3 dB at rated power

THD (2 x 4 ohms):
<0.025% @ 1200 W @ 1 kHz with both channels driven

THD (2 x 8 ohms):
<0.008% @ 800 W @ 1 kHz with both channels driven

THD (1 x 4 ohms):
<0.015% @ 1325 W @ 1kHz

THD (1 x 8 ohms):
<0.006% @ 830 W @ 1kHz

SMPTE IMD:
<0.1% 60 Hz and 7 kHz, 800 W @ 8 ohms

Slew Rate:
35 V/us

Damping Factor (8 ohms):
>250:1 @ 20 Hz – 1 kHz

Input CMRR:
> 65 dB @ 1 kHz

Voltage Gain:
x 40 (32 dB)

Input Sensitivity:
1.73 volts @ 4 ohms, 2 volts @ 8 ohms

Input Impedance:
20 k ohms, balanced

Hum and Noise:
>-115 dB, “A” weighted referenced to rated power @ 8 ohms

Crosstalk:
>-55 dB, “A” weighted referenced to rated power @ 8 ohms

Current Draw @ 1/8 power:
575 watts @ 4 ohms, 380 watts @ 8 ohms

Current Draw @ 1/3 power:
1185 watts @ 4 ohms, 860 watts @ 8 ohms

Idle Current Draw:
35 VA in Standby Mode

Maximum Current Draw:
2,760 VA (time limited by breaker)

Thermal Emissions (BTU/hr.):
940 @ 1/8 power 4 ohms,
615 @ 1/8 power 8 ohms,
1830 @ 1/3 power 4 ohms,
1335 @ 1/3 power @ 8 ohms

Cooling:
120 mm DC fan, off until heatsinks reach 45° C, then variable speed

Controls:
2 rear panel attenuators, sequential turn-on / off

Indicator LEDs:
2 Clip, 2 Signal, 2 LFC, 1 Protect, 1 Power

Protection:
Temp., DC, turn-on bursts, subsonic, incorrect load or short

Connectors:
8-pin plugable signal input, 4-pin plugable sequential power, 4-terminal barrier strip, IEC AC power connector

Construction:
All steel; 16 ga. chassis, 18 ga. top, 12 ga. rack ears

Dimensions:
5.25" x 19" x 16.4"
133 mm x 483 mm x 416.6 mm,

Gross Weight:
51.4 lbs. (23.3 kg.)

Net Weight:
45 lbs. (20.4 kg.)

Due to our efforts for constant improvements, features and specifications are subject to change without notice.

Notes:

PEAVEY ELECTRONICS CORPORATION LIMITED WARRANTY

Effective Date: July 1, 1998

What This Warranty Covers
Your Peavey Warranty covers defects in material and workmanship in Peavey products purchased and serviced in the U.S.A. and Canada.

What This Warranty Does Not Cover
The Warranty does not cover: (1) damage caused by accident, misuse, abuse, improper installation or operation, rental, product modification or neglect; (2) damage occurring during shipment; (3) damage caused by repair or service performed by persons not authorized by Peavey; (4) products on which the serial number has been altered, defaced or removed; (5) products not purchased from an Authorized Peavey Dealer.

Who This Warranty Protects
This Warranty protects only the original retail purchaser of the product.

How Long This Warranty Lasts
The Warranty begins on the date of purchase by the original retail purchaser. The duration of the Warranty is as follows:

Product Category	***Duration***
Guitars/Basses, Amplifiers, Pre-Amplifiers, Mixers, Electronic Crossovers and Equalizers	***2 years *(+ 3 years)***
Drums	***2 years *(+ 1 year)***
Enclosures	***3 years *(+ 2 years)***
Digital Effect Devices and Keyboard and MIDI Controllers	***1 year *(+ 1 year)***
Microphones	***2 years***
Speaker Components (incl. speakers, baskets, drivers, diaphragm replacement kits and passive crossovers) and all Accessories	***1 year***
Tubes and Meters	***90 days***

[*denotes additional warranty period applicable if optional Warranty Registration Card is completed and returned to Peavey by original retail purchaser within 90 days of purchase.]

What Peavey Will Do
We will repair or replace (at Peavey's discretion) products covered by warranty at no charge for labor or materials. If the product or component must be shipped to Peavey for warranty service, the consumer must pay initial shipping charges. If the repairs are covered by warranty, Peavey will pay the return shipping charges.

How To Get Warranty Service
(1) Take the defective item and your sales receipt or other proof of date of purchase to your Authorized Peavey Dealer or Authorized Peavey Service Center.
OR
(2) Ship the defective item, prepaid, to Peavey Electronics Corporation, International Service Center, 412 Highway 11 & 80 East, Meridian, MS 39301 or Peavey Canada Ltd., 95 Shields Court, Markham, Ontario, Canada L3R 9T5. Include a detailed description of the problem, together with a copy of your sales receipt or other proof of date of purchase as evidence of warranty coverage. Also provide a complete return address.

Limitation of Implied Warranties
ANY IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE LENGTH OF THIS WARRANTY.
Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Exclusions of Damages
PEAVEY'S LIABILITY FOR ANY DEFECTIVE PRODUCT IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE PRODUCT, AT PEAVEY'S OPTION. IF WE ELECT TO REPLACE THE PRODUCT, THE REPLACEMENT MAY BE A RECONDITIONED UNIT. PEAVEY SHALL NOT BE LIABLE FOR DAMAGES BASED ON INCONVENIENCE, LOSS OF USE, LOST PROFITS, LOST SAVINGS, DAMAGE TO ANY OTHER EQUIPMENT OR OTHER ITEMS AT THE SITE OF USE, OR ANY OTHER DAMAGES WHETHER INCIDENTAL, CONSEQUENTIAL OR OTHERWISE, EVEN IF PEAVEY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.
Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

If you have any questions about this warranty or service received or if you need assistance in locating an Authorized Service Center, please contact the Peavey International Service Center at (601) 483-5365 / Peavey Canada Ltd. at (905) 475-2578.

Features and specifications subject to change without notice.

IMPORTANT SAFETY INSTRUCTIONS

WARNING: When using electric products, basic cautions should always be followed, including the following:

1. Read all safety and operating instructions before using this product.
2. All safety and operating instructions should be retained for future reference.
3. Obey all cautions in the operating instructions and on the back of the unit.
4. All operating instructions should be followed.
5. This product should not be used near water (i.e., a bathtub, sink, swimming pool, wet basement, etc.)
6. This product should be located so that its position does not interfere with its proper ventilation. It should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
7. This product should not be placed near a source of heat such as a stove, radiator, or another heat producing amplifier.
8. Connect only to a power supply of the type marked on the unit adjacent to the power supply cord.
9. Never break off the ground pin on the power supply cord. For more information on grounding, write for our free booklet “Shock Hazard and Grounding."
10. Power supply cords should always be handled carefully. Never walk on or place equipment on power supply cords. Periodically check cords for cuts or signs of stress, especially at the plug and the point where the cord exits the unit.
11. The power supply cord should be unplugged when the unit is to be unused for long periods of time.
12. If this product is to be mounted in an equipment rack, rear support should be provided.
13. Metal parts can be cleaned with a damp rag. The vinyl covering used on some units can be cleaned with a damp rag or an ammonia-based household cleaner if necessary. Disconnect unit from power supply before cleaning.
14. Care should be taken so that objects do not fall and liquids are not spilled into the unit through the ventilation holes or any other openings.
15. This unit should be checked by a qualified service technician if:
    a. The power supply cord or plug has been damaged.
    b. Anything has fallen or been spilled into the unit.
    c. The unit does not operate correctly.
    d. The unit has been dropped or the enclosure damaged.
16. The user should not attempt to service this equipment. All service work should be done by a qualified service technician.
17. This product should be used only with a cart or stand that is recommended by Peavey Electronics.
18. Exposure to extremely high noise levels may cause a permanent hearing loss. Individuals vary considerably in susceptibility to noise induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a sufficient time. The U.S. Government’s Occupational Safety and Health Administration (OSHA) has specified the following permissible noise level exposures.

Duration Per Day In Hours	Sound Level dBA, Slow Response
8	90
6	92
4	95
3	97
2	100
1 1/2	102
1	105
1/2	110
1/4 or less	115

According to OSHA, any exposure in excess of the above permissible limits could result in some hearing loss. Ear plugs or protectors for the ear canals or over the ears must be worn when operating this amplification system in order to prevent a permanent hearing loss if exposure is in excess of the limits as set forth above. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels such as this amplification system be protected by hearing protectors while this unit is in operation.

SAVE THESE INSTRUCTIONS!

Features and specifications subject to change without notice.

Peavey Electronics Corporation • 711 A Street • Meridian • MS • 39301
(601) 483-5376 • FAX (601) 486-1678 • http://aa.peavey.com

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